TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

MEETING MATERIALS

March 4, 2010

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Caltrans

BAY AREA TOLL AUTHORITY

STATE OF CALIFORNIA
CALIFORNIA TRANSPORTATION COMMISSION

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Letter of Transmittal

TO: Toll Bridge Program Oversight Committee (TBPOC)

DATE: February 24, 2010

FR: Program Management Team (PMT)

RE: TBPOC Meeting Materials Packet – March 4, 2010

Herewith is the TBPOC Meeting Materials Packet for the March 4th meeting. The packet includes memoranda and reports that will be presented at the meeting. A Table of Contents is provided following the Agenda to help locate specific topics.

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

Final Agenda

TBPOC MEETING
March 4, 2010, 10:00 am – 1:00 pm
Mission Bay Office, 325 Burma Road, Oakland, CA

TBPOC - PMT pre-briefing, 10:00 am – 11:00 am
TBPOC meeting, 11:00 am – 1:00 pm

	Topic	Presenter	Time	Desired Outcome
1.	**CHAIR'S REPORT**	S. Heminger, BATA	5 min	Information
2.	**TBPOC/ ABF/ TYLMN Discussion** a. Self-Anchored Suspension (SAS) Superstructure Mitigation and Acceleration Update 1) ABF Proposal 2) TBPOC China Trip	PMT	60 min	Information
3.	**CONSENT CALENDAR** a. TBPOC Meeting Minutes: 1) February 11, 2010 Meeting Minutes* 2) February 5, 2010 Conference Call Minutes* b. Contract Change Orders (CCOs): 1) YBI Detour CCO 204-S1 (Additional Funding for 2009 Labor Day Weekend Roll Out/ Roll In)*	 A. Fremier, BATA A. Fremier, BATA D. Noel, CTC	 1 min 1 min 1 min	 Approval Approval Approval
4.	**PROGRESS REPORTS** **a.** Draft Project Progress and Financial Update February 2010**	A. Fremier, BATA	2 min	Approval
5.	**PROGRAM ISSUES** a. Project Safety and Security*	T. Anziano, CT	10 min	Information
6.	**SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES** a. Yerba Buena Island Detour 1) Update 2) S-Curve Update b. Yerba Buena Island Transition Structures No. 1 1) Update c. Oakland Touchdown No. 1 1) Update	 T. Anziano, CT T. Anziano, CT T. Anziano, CT T. Anziano, CT	 5 min 5 min 5 min 5 min	 Information Information Information Information
7.	**EYEBAR REPAIR UPDATE**	B. Maroney, CT	5 min	Information
8.	**ANTIOCH/ DUMBARTON BRIDGE RETROFIT UPDATE***	J. Weinstein, BATA	5 min	Information
9.	**OTHER BUSINESS**			

Next TBPOC Meeting: April 1, 2010, 10:00 AM – 1:00 PM
Mission Bay Office, Oakland, CA

*Attachments
**Stand-alone document included in the binder

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Table of Contents

TBPOC MEETING
March 4, 2010

*Attachments
**Stand-alone document included in the binder

ITEM 1: CHAIR'S REPORT

No Attachments

ITEM 2: TBPOC/ ABF DISCUSSION

a. SAS Mitigation and Acceleration Update

Attachment: SAS Project Schedule Mitigation Workplan

DRAFT Rev 1- SAS Project Schedule Mitigation Workplan

March 04- 2010

Baseline
Contract
ABF Update
Team Proposed Mitigation
Critical

2009 | 2010 | 2011 | 2012 | 2013 | 2014

J F M A M J J A S O N D | 1 2 3 4 5 6 7 8 9 10 11 12

SAS ABF December 2009 Schedule

1	Phase 1 Area Available for YBI	10/29; Original Date: Mar 2012; 8/14/13
2	Phase 2- Ready to Open WB Lanes	4/27; Original Date: Sep 2012; WB Ready to Open; 4/30/14
3	Phase 3- Ready to Open EB Lanes	10/24; Mar 2013; 9/9/14
		Original; Contract; Update

Team Proposed Mitigation Schedule Rev. 1

4	Lift 13 & 14 Shop Drawings Approved
5	Lift 13 Shop Drawings Translation
6	Lift 13 Fabrication
7	Lift 14 Shop Drawings Translation
8	Lift 14 Fabrication
9	Lift 13 & 14 Shipment & offloading
10	Lift 12,13,14 Erection
11	OBG Voyage 1 Shipment & Off Loading
12	OBG Erection Lift 1 thru 11
13	T1 Tower Shipment & Off Loading
14	Tower Erection / Install Saddle
15	Erect Catwalk and Tramway
16	Cable thru Load Transfer
17	Phase 1 Complete- Provide Access to YBI
18	Bearings, Shear Key, Hinge A, Seismic Jts
19	Complete Suspenders & Post Load Transfer
20	Final Suspender Adjustment
21	Open WB Traffic
22	MEP
23	Open EB Traffic

13E 14W

1 If Shop Drawing Completion :
13E: Jan 25, 2010
13W: Feb 15, 2010
14E: Mar 1, 2010
14W: Mar 1, 2010

2 If Tower Shipment Projection is in April. (Current Trend is May)

3 East End Fabrication

4 Opportunity - Early Catwalk Installation & Cable Erection

2 | 9 Months | 2 | 9 Months | 2 | 5 Months | 12 Months | 2 | Early Catwalk Installation | 9 Months | 2 | 6 Months | 1

Area To YBI Contract (Phase 1) Sep-2012

Ready for WB Mar- 2013

Ready for EB Opening Sep 2013

WB Ready to Open 5 Months later than the Original Contract date

Note: ABF buy-in to the acceleration opportunities is required.

YBI 1 Contract

YBI 1 Contract

12/15/2009 Bid Opening

1st Working Day

9/1/2010 Area PRA Available

12/13/2010 Area PR Available

10/31/2012 SAS Contract Area Available Area FP

Apr-2013 Ready for WB

Oct-2013 Ready for EB

Dec-2013 Project Completion

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 3a1

Item- Consent Calendar
TBPOC Meeting/ Conference Call Minutes
February 11, 2010 Meeting Minutes

Recommendation:
APPROVAL

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
The Program Management Team has reviewed and requests TBPOC approval of the February 11, 2010 Meeting Minutes.

Attachment(s):
February 11, 2010 Meeting Minutes

TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

MEETING MINUTES
February 11, 2010, 10:00 AM – 1:00 PM
Mission Bay Office, Conference Room 1906, 325 Burma Road, Oakland
TBPOC-PMT pre-briefing, 10:00 AM – 11:00 AM
TBPOC meeting, 11:00 AM – 1:00 PM

Attendees: TBPOC Members: Steve Heminger, Bimla Rhinehart, and Randy Iwasaki
PMT Members: Tony Anziano, Andrew Fremier, and Stephen Maller
Participants: Alan Cavendish-Tribe, Michele DiFrancia, Mike Forner, Ted Hall, Beatriz Lacson, Peter Lee, Brian Maroney, Dina Noel, Gary Pursell, Bijan Sartipi, Pete Siegenthaler, Jon Tapping, and Jason Weinstein
Part-Time Participants
ABF: Bob Luffy, Doug Fuller, Pat Flaherty, Mike Flowers, Don Jones, Brian Petersen, and Peter Vander Waart
TYL/M&N: Al Ely, Dennis Jang, Marwan Nader, and Bob Nichol

Convened: 11:05 AM

Items	Action
1. CHAIR'S REPORT • Steve Heminger, the Chair, reported that the press is excited about the progress with the recent lifts of 1E and 2E. He urged everyone to keep the momentum going. o The Chair complimented B. Ney on his exemplary work and noted that the website animation on Lifts 13 and 14 gave him a much better understanding of their complexity.	
2. TBPOC / ABF / TYLMN Discussion a. SAS Mitigation and Acceleration Update • The Chair referred to a shipment schedule that ABF handed out in November 2009 and the February 2010 SAS Project Mitigation Workplan, and expressed concern regarding the schedule for shipments of lifts 13 and 14 and the last tower lift, which would create a	

Items	Action
six-month gap in the schedule. o The Chair stressed the importance of opening the bridge in 2013 and that any other date is unacceptable. He emphasized the elimination of this schedule gap as the no. 1 priority.	
• B. Luffy/M. Flowers pointed out that shop drawings are still an issue with respect to projecting schedule. ZPMC is unable to address lifts 13 and 14 until they see all the drawings. A lot of work is being done and will be done to accelerate both shipments, but an acceleration/mitigation plan is not currently available due to insufficient information. o ABF will know more in early April when ZPMC will have enough drawings to work with, and indicated it will also be an opportune time for the TBPOC to visit China.	• ABF to present a conceptual mitigation and acceleration plan, including a status report and schedule, to the TBPOC at its March 4 meeting.
• Processes, challenges, lessons learned, and impact of leadership/ management changes in China were discussed.	
• ABF reported that intense, heavy field activity on the project is imminent and requested the people in the room to set the example on safety observance and vigilance in the workplace, and to spread the word on this.	• Include project safety and security update in the TBPOC March meeting agenda.
a. Proposed TBPOC China Visit in March 2010	
• P. Lee presented possible dates for a proposed trip to China, for TBPOC approval. o R. Iwasaki suggested that a clear agenda for the China trip be	• The TBPOC deferred decision until the trip purpose/ schedule/logistics are clarified at the March 4 TBPOC meeting.

Items	Action
developed. o Also, determine if the TBPOC should go to China or have ZPMC come to the Bay Area, possibly in April.	
3. CONSENT CALENDAR a. TBPOC Meeting/Conference Call Minutes 1) January 19, 2010 Conference Call Minutes 2) January 7, 2010 Meeting Minutes b. Contract Change Orders (CCOs) 1) Yerba Buena Island Detour (YBID) CCO 240-S1 (Nighttime Lane Closures), $1,026,740 • D. Noel explained that CCO 240-S1, in the amount of $1,026,740, was to pay for additional nighttime lane closures on the YBID through the end of June 2010. o The TBPOC moved to approve $300,000 for CCO 240-S1. Staff to request additional funds in April when an exit strategy is in place.	• The TBPOC **APPROVED** consent calendar items a1) and a2), as presented. • Item b1) was taken off the Consent Calendar for discussion. • The TBPOC **APPROVED** $300,000 for CCO 240-S1.
4. PROGRAM ISSUES a. TBSRP Risk Management Update • J. Tapping provided a Risk Management Briefing, for TBPOC information, which covered Q4 2009 Adequacy of Reserves, Risk to CCO Progression, Q4 2009 Opportunities, and Look Ahead to Q1 2010. A copy of the presentation was handed out. o R. Iwasaki suggested putting on paper the opportunities that we can agree on and make them happen. o J. Tapping recommended empowering a focus team to develop a schedule agreed upon by both the TBPOC and ABF.	• Staff to develop a proposal in writing with specific ideas and personnel assigned, for the Chair to discuss and seek agreement with B. Luffy.

Items	Action
b. Gateway Park Update • A. Fremier reported that the Gateway Park Working Group will host the first of two public workshops on February 25, 2010, to introduce the project to the public and stakeholders, and solicit input on the objectives and programmatic ideas for the park. o Postcard invitations were handed out.	
5. PROGRESS REPORTS a. Final Fourth Quarter 2009 Project Progress and Financial Update/ Annual Progress Report 2009 • A. Fremier presented, for TBPOC approval, the proposed final Fourth Quarter 2009 Project Progress and Financial Update which is scheduled for distribution on February 16, 2010. o It was noted that the Annual Progress Report 2009 will be developed as a stand-alone document for limited distribution.	• The TBPOC **APPROVED** the Final Fourth Quarter 2009 Project Progress and Financial Update, as presented.
6. SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) UPDATES a. Yerba Buena Island Detour 1) Update • T. Anziano reported the project is proceeding smoothly on schedule. 2) S-Curve Update • T. Anziano indicated that there have been no major accidents and that conditions remain stable. b. Yerba Buena Island Transition Structures (YBITS) No. 1 1) Update • The YBITS No. 1 contract was awarded on February 3 to MCM.	

	Items	Action
	c. Oakland Touchdown (OTD) No. 1 1) Update • T. Anziano reported that the project is on track to complete on schedule.	
7	**EYEBAR REPAIR UPDATE** • B. Maroney gave an update on the eyebar repair project. o There is a draft metallurgical report circulating that should provide no surprises. o The Blue Ribbon Panel is meeting next week.	
8	**ANTIOCH AND DUMBARTON RETROFIT UPDATE** a. Antioch Retrofit Contract – Addendum No. 2 • J. Weinstein, presented for TBPOC approval, Addendum No. 2 which covers approximately 25 plan sheet revisions and various changes in specifications. o The addendum will not affect the current schedule for the Antioch retrofit contract which has a bid opening date of March 10, 2010. • Dumbarton Ready to List (RTL) date has advanced from March 1 to February 16, 2010, with bid opening anticipated in mid-June. • The Chair noted that the BATA Oversight Committee, at its January meeting, raised tolls effective July 2010, partly to fund the Antioch and Dumbarton seismic retrofit projects.	• The TBPOC **APPROVED** Addendum No. 2 for the Antioch retrofit contract, as presented.
9	**OTHER BUSINESS** • The bikepath connection to YBI, staging during demolition, and related safety issues were discussed.	• T. Anziano to provide the TBPOC with an update on these items at a future TBPOC

Items	Action
• B. Rhinehart gave a reminder about discussion on furloughs and COS savings. o T. Anziano indicated that this will be on the TBPOC April meeting agenda under COS update. • The March 4 TBPOC meeting has been moved from Sacramento to the Bay Area, 10:00 AM – 1:00 PM.	meeting.

Adjourned: 1:36 PM

MEETING MINUTES
February 11, 10:00 AM – 2:00 PM
Mission Bay Office, Conference Room 1906, 325 Burma Road, Oakland

APPROVED BY:

_____ _____
STEVE HEMINGER, Executive Director Date
Bay Area Toll Authority

_____ _____
RANDELL H. IWASAKI, Director Date
California Department of Transportation

_____ _____
BIMLA G. RHINEHART, Executive Director Date
California Transportation Commission

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 3a2

Item- Consent Calendar
TBPOC Meeting/ Conference Call Minutes
February 5, 2010 Conference Call Minutes

Recommendation:
APPROVAL

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
The Program Management Team has reviewed and requests TBPOC approval of the February 5, 2010 Conference Call Minutes.

Attachment(s):
February 5, 2010 Conference Call Minutes

TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

CONFERENCE CALL MINUTES

February 5, 2010, 9:00 PM – 10:00 PM

Attendees: TBPOC Members: Steve Heminger, Bimla Rhinehart, and Randy Iwasaki
PMT Members: Tony Anziano, Andrew Fremier, and Stephen Maller
Participants: Michele DiFrancia, Peter Lee, Brian Maroney, Mika Miyasato, Dina Noel, Jon Tapping, and Jason Weinstein

Convened: 9:05 PM

	Items	Action
1.	**TBPOC China Visit** • TBPOC discussed the purpose and timing of TBPOC's visit to China.	• TBPOC deferred making decision on their China trip until the February 11, 2010 TBPOC meeting.
2.	**TBSRP 4th Quarter 2009 Cost Forecast** • T. Anziano presented TBSRP 4th Quarter 2009 Cost Forecast o Chair commented that Westbound opening date should be revised in TBSRP 1st Quarter 2010 Report. o A. Fremier commented YBITS and OTD Capital Outlay Support items do not total correctly.	• **APPROVED** TBSRP 4Q 2009 Cost Forecast. TBPOC also directed staff to change the schedule status (pg 7 of draft 4Q 2009 report) for "Westbound Open" from yellow to red. • TBPOC comments on 4Q report to be sent to Peter Lee by February 11.
3.	**Synchronizing Q4 2009 Cost Risk Results with Q4 2009 TBSRP Report** • J. Tapping presented 4th Quarter Risk Management synched up with 4th Quarter budget forecast. o Presented major changes in risk management cost. o Antioch and Dumbarton bridges will be added to the 1st Quarter 2010 Report. o Chair requested that items which change risk management cost	

Items	Action
significantly should be disaggregated and highlighted.	
4. Other Business • Chair requested materials in advance of meeting with ABF on February 11.	• T. Anziano to prepare materials in preparation for discussion with ABF at the February 11, 2010 TBPOC meeting.

Adjourned: 9:35 AM

CONFERENCE CALL MINUTES
February 5, 2010, 9:00 AM – 10:00 AM

APPROVED BY:

_____ _____
STEVE HEMINGER, Executive Director Date
Bay Area Toll Authority

_____ _____
RANDELL H. IWASAKI, Director Date
California Department of Transportation

_____ _____
BIMLA G. RHINEHART, Executive Director Date
California Transportation Commission

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Dina Noel, Assistant Deputy Director Toll Bridge Program, CTC

RE: Agenda No. - 3b1

Item- Consent Calendar
Yerba Buena Island Detour Contract Change Order No. 204-S1 – Additional Funding for 2009 Labor Day Weekend Roll Out / Roll In

---

Recommendation:
APPROVAL

Cost:
CCO 204–S1: $2,500,000.00

Schedule Impacts:
None

Discussion:
CCO 204-S1 in the amount $2,500,000 is necessary to pay for additional costs associated with the 2009 Labor Day Weekend Roll Out / Roll In event that placed traffic on the new YBI Detour. The majority of work performed during the Labor Day Weekend bridge closure was paid under CCO No. 204 originally estimated at $3,500,000. The additional $2,500,000 in CCO 204-S1 will cover unanticipated costs incurred in the preparation, performance and completion of this work.

Unforeseen costs include extensive survey and preparation work associated with the existing concrete pier prior to the roll out of the old span and modifications to the new expansion joints, bearings and concrete deck surfacing performed after the roll in of the new span. Mobilization, demobilization and costs associated with providing access to the work also exceeded the original estimate.

The YBID Implementation Strategy Memo has previously identified $1,400,000 in budgeted costs pertaining to the $2,500,000 being requested under this change order.

Attachment(s):

1. Draft CCO: 204-S1
2. Draft CCO Memorandum: 204-S1
3. YBID Implementation Strategy Memo, March 1, 2010

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 204	Suppl. No. 1	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.:

To: **CC MYERS INC**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. ***NOTE: This change order is not effective until approved by the Engineer.***

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Force Account:

Provide additional funds for the work specified under the original Change Order No. 204.

Estimated cost of Extra Work at Force Account $2,500,000.00

Estimated Cost: Increase ☑ **Decrease** ☐ **$2,500,000.00**

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature	Resident Engineer	Date
	BILL CASEY	

Approval Recommended by

Signature	Area Construction Manager	Date
	DEANNA VILCHECK	

Engineer Approval by

Signature	SFOBB Construction Manager	Date
	MIKE FORNER	

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / DEANNA VILCHECK	FILE: **E.A.** 04 - 0120R4
FROM: BILL CASEY	**CO-RTE-PM** SF-80-12.6/13.2
	FED. NO.
CCO#: **204** SUPPLEMENT#: **1** Category Code: **CHXX**	CONTINGENCY BALANCE (incl. this change) **$38,401,164.59**
COST: **$2,500,000.00** INCREASE ☑ DECREASE ☐	HEADQUARTERS APPROVAL REQUIRED? ☑ YES ☐ NO
SUPPLEMENTAL FUNDS PROVIDED: **$0.00**	IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? ☑ YES ☐ NO
CCO DESCRIPTION: Labor Day Weekend Support Costs	**PROJECT DESCRIPTION:** CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE

Original Contract Time:	Time Adj. This Change:	Previously Approved CCO Time Adjustments:	Percentage Time Adjusted: (including this change)	Total # of Unreconciled Deferred Time CCO(s): (including this change)
475 Day(s)	**0** Day(s)	**1660** Day(s)	**349** %	**0**

THIS CHANGE ORDER PROVIDES FOR:

Additional funding for support costs pertaining to the traffic switch to the YBI Detour during the 2009 Labor Day Weekend closure of the San Francisco Oakland Bay Bridge (SFOBB).

This contract calls for the construction of a temporary detour for both eastbound and westbound I-80 traffic that allows for the tie in of the east span of the new San Francisco Oakland Bay Bridge (SFOBB) to Yerba Buena Island. The detour consist of three main structures, the east tie in (ETI) to the bridge, the west tie in (WTI) to the island and the viaduct structure between the two tie ins.

The original contract was awarded as a performance based contract with the contractor responsible for the design of the structures based upon meeting specified design criteria. The Department issued a December 14, 2006 memo entitled Strategy for South-South Detour Contract Completion which was approved by Tony Anziano (Toll Bridge Program Manager), Richard Land (Chief Engineer) and subsequently by the TBPOC. This memo recommended that the design of the ETI structure be assumed by the Department as opposed to the as-bid performance based contractor design.

The Department based design of the ETI structure required the roll out of an existing span of the SFOBB and the roll in of the new ETI span. This roll out / roll in required a full 3 to 4 day closure of the SFOBB. The actual roll out / roll in and traffic switch to the YBI Detour was performed during a full closure of the SFOBB over Labor Day Weekend 2009. The major work that took place over that weekend concerned the roll out of the existing steel truss span and the roll in of the new East Tie In Truss span. Each of these spans are double deck steel trusses approximately 90 meters long, 25 meters wide and weigh approximately 4,000 metric tons.

The original Change Order No. 204 provided compensation for (1) the installation of the expansion joints, bearings and barriers for the ETI truss (2) support costs associated with the roll out / roll in operations and (3) support costs associated with the actual Labor Day Weekend closure of the SFOBB.

The actual costs of the roll out / roll in operation performed during the closure of the SFOBB were consistent with the costs estimated for the original change order. However, the extent of the cost incurred both prior to and after the roll out / roll in operation significantly exceeded the original estimate. Extensive costs were incurred at Pier E1 prior to the closure related to surveying the as-built condition of that structure in order to insure the existing roll out span could be safety and efficiently removed and that the new roll in span would properly fit onto the existing structure. The extent of the coring required at the Pier E1 concrete deck was also more extensive than estimated.

Unanticipated costs were incurred after the detour was put in place due to numerous adjustments associated with the new expansion joints and isolation bearings and improvements made to the concrete deck to improve the profile of the new roadway. The extent of the costs associated with the mobilization and demobilization of the equipment required for the roll out / roll in event also exceeded the original estimate.

Due to these additional costs it is now anticipated that an additional $2,500,000.00 will be required to fund this work. Compensation shall be paid as extra work at force account at an estimated costs $2,500,000.00 which shall be financed from the contract's contingency funds. A cost analysis is on file.

No adjustment of contract time is warranted as the work shall not affect the controlling operation.

This change was concurred by Alec Melkonians - Asst. Project Manager, Minh B. Nguyen - Project Engineer, Lina Ellis - Maintenance, and Patrick Treacy - HQ Asst. Construction Coordinator.

CONCURRED BY:		
Construction Engineer:	Bill Casey, Resident Engineer	Date
Bridge Engineer:		Date
Project Engineer:	Minh B. Nguyen, PE	Date
Project Manager:	Alec Melkonians	Date
FHWA Rep.:		Date
Environmental:		Date
Other (specify):	Lina Ellis, Maintenance	Date
Other (specify):	Patrick Treacy, HQ Asst.Const.Co	Date
District Prior Approval By:		Date
HQ (Issue _Approve) By:	Larry Salhaney, HQ CCO Engine	Date
Resident Engineer's Signature:		Date

ESTIMATE OF COST

	THIS REQUEST	TOTAL TO DATE
ITEMS	$0.00	$0.00
FORCE ACCOUNT	$2,500,000.00	$6,000,000.00
AGREED PRICE	$0.00	$0.00
ADJUSTMENT	$0.00	$0.00
TOTAL	$2,500,000.00	$6,000,000.00

FEDERAL PARTICIPATION

☐ PARTICIPATING ☐ PARTICIPATING IN PART ☑ NONE
☐ NON-PARTICIPATING (MAINTENANCE) ☐ NON-PARTICIPATING

FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)
☐ CCO FUNDED PER CONTRACT ☐ CCO FUNDED AS FOLLOWS

FEDERAL FUNDING SOURCE	PERCENT

Yerba Buena Island Detour, Contract No. 04-0120R4
Contract Change Order Implementation Strategy
March 1, 2010

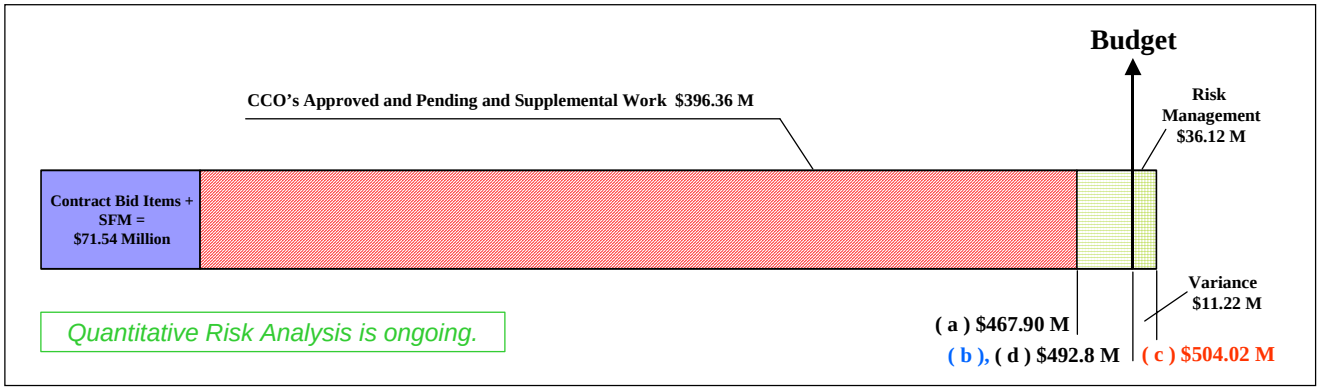
DRAFT

Yerba Buena Island Detour (Contract 04-0120R4)			
Contract Award:	**March 10th, 2004**	Suspension Days:	**302 Working Days**
Original Working Days:	**475 Working Days**	Contract Extensions:	**1660 Working Days**
Original Contract Completion:	**July 27th, 2005**	Projected Contract Completion:	**December 10, 2010**

Introduction

Two memos were developed to outline a strategy for a revised YBID project that enhanced YBID viaduct design, developed tie-in design (east and west) in-house, improved the retrofit of the YBI viaduct (replacing the top deck of the viaduct rather than retrofitting in place) and advanced and incorporated select YBITS foundation work. The two memos are "San Francisco-Oakland Bay Bridge Corridor Schedule Mitigation – Strategy for South-South Detour Contract Completion" issued December 14, 2006, and "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order" issued on December 25, 2006. This strategy will result in substantial increases in the cost of the YBID project.

As approved at the June 2009 TBPOC meeting the revised budget for the YBID project is 492.8M. This figure was established in May 2009 using all available information to date. This figure is within the projects approved budget balance beam, as shown below:



Scope of Work for YBID

The revisions to the original scope of work currently associated with the Yerba Buena Island Detour Project have been assigned into the following categories with their associated estimated cost:

Category	Scope of Work	Current Budget (June 2009)	In Progress Status Update from June 09 Approved Budget	
			Current	Delta
(0)	Original Bid Items, Baseline CCOs (1 through 48), and State Furnished Materials	$83.7	$83.7	$0
(1)	YBID New Viaduct	$40.1	$42.3	$2.2
(2a)	West Tie-In Existing Viaduct Phase 1	$40.1	$40.1	$0.0
(2b)	West Tie-In Phase 2	$21.8	$18.0	($3.8)
(3)	East Tie-In	$140.0	$144.3	$4.3
(4)	YBI Transition Structures Advance Foundations	$104.3	$103.6	($0.7)
(5)	Administrative Issues and General CCOs	$37.8	$42.1	$4.3
Subtotal		**$467.8**	**$474.1**	**$6.3**
Contingency		**$25.0**	**$18.7**	
Approved Budget		**$492.8**		

Contract payments as of February 20, 2009: $432.1M

As shown, the current status of CCOs required to modify the original scope of the YBID work as defined in Categories 1 through 5 is $390.4M. The status of each category of work is discussed in the succeeding pages of this report.

Bid Items, Baseline CCOs, & State Furnished Material (0)

The break down of Category (0) is as follows:

Original Contract Amount	$ 71.2 million
Baseline CCOs (1 through 48)	$ 12.1 million
State Furnished Materials	$ 0.4 million
Total	$ 83.7 million

Baseline Contract Change Orders (1 through 48)

CCO #	Description	Executed Date	Cost
1	Flagging and Traffic Control	5/13/2004	$100,000.00
1S1	Additional Funds for Flagging and Traffic Control	2/9/2007	$200,000.00
2	Bidder Compensation	5/8/2004	$1,575,000.00
3	Partnering	9/7/2004	$25,000.00
4	DRB	9/7/2004	$100,000.00
5	Federal Trainee Program	11/12/2004	$20,000.00
5S1	Non-Journey Person Training	3/10/2005	$50,000.00
6	Removal of DBE/SBE Monitoring	2/10/2005	$0.00
7	Sampling and Analysis Work	8/30/2004	$30,000.00
8	SWPPP Maintenance Sharing	8/30/2004	$75,000.00
9	Additional Photo Survey/Public Relations	9/14/2004	$50,000.00
10	Temporary Shuttle Van Service	7/16/2004	$650,000.00
10S1	Additional Funds for Temporary Shuttle Van Service	6/23/2005	$100,000.00
10S2	Additional Funds for Temporary Shuttle Van Service	1/12/2007	$500,000.00
11	Utility Potholing	9/14/2004	$100,000.00
12	Just-In-Time Training (RSC Pavement)	2/10/2005	$5,000.00
13	PMIV Document Management System	11/3/2004	$486,743.50
14	Temporary Suspension	5/19/2004	$0.00
15	Archaeology Investigation	7/19/2004	$30,000.00
15S1	Additional Funds for Archaeology Investigation	4/22/2005	$15,000.00
16	Roadway Profile at WTI	Voided	N/A
17	Modify Drainage at G4 Entry Vault	10/24/2006	$108,217.45
18	Access Control Measures	9/8/2004	$50,000.00
19	EDR1 Alignment Modification	5/12/2005	$0.00
20	A490 Bolts	10/23/2006	$0.00
21	Removal /Disposal of Stairway	4/13/2005	$14,060.00
22	Clean Stairs and Walkways	5/24/2005	$35,000.00
22S1	Additional Funds for Cleaning Stairs and Walkways	11/24/08	$25,000.00
23	Shared Field Data System (ShareArchive)	Voided	N/A
24	East and West Tie-In Temporary Suspension	2/1/2005	$2,181,467.40
24S1	Read Inclinometer/Adjust Equipment Costs	10/18/2005	$29,782.99
24S2	Temporary Suspension Partially Extended	5/2/2006	$4,812,631.58
24S3	Contract Days Extension/TRO Compensation	Voided	N/A
25	Bent 48, 49R, 52R Outside Boundary	3/24/2005	($19,000.00)
26	Bent 48 Articulation	4/22/2005	$0.00
27	Bent 52L Footing Conflict	1/19/2006	$94,386.51
28	Hydroseed Around W2 Columns	3/24/2005	$20,000.00
29	Replacement of Surveillance Camera	3/24/2005	$3,542.00
30	Additional Elastic Response Analysis	5/31/2005	$10,700.00
31	Soil Analysis Outside Plan Limits	6/27/2005	$20,000.00
32	SFPUC Permit Specification Change	5/17/2005	$0.00
33	Design Enhancements	Voided	N/A
34	Pole Structure Welding Specification Revision	9/30/2005	$0.00
35	Revision of East Tie-In Design Criteria	Voided	N/A
36*	Extend Limits of Viaduct Demolition	Voided	N/A
37	4 Hr Emergency Travel Way	Voided	N/A
37S1	Emergency Travel Way Falsework	Voided	N/A
38	Revision of West Tie-In Design Criteria	8/4/2005	$0.00
39	Provide Shuttle Service to USCG	6/27/2005	$10,000.00
40	Sewer Pipe Material Change	9/26/2005	$1,561.95
41	Bent 49L Utility Relocation	Voided	N/A
42	Bent 48R Pile Load Test	9/12/2005	$20,000.00
42S1	Bent 52R Pile Load Test	12/15/2005	$5,000.00
43	Material On Hand Specification Change	9/16/2005	$75,953.88
43S1	Addition of YBITS Advance to Material On Hand	Voided	N/A
44	Electrical Call Box Relocation		$47,480
45	Additional SWPPP	2/21/2006	$250,000.00
46	Southgate Road Reopening	3/8/2006	$50,000.00
47	Hazardous/Non-Hazardous Soil Removal	12/15/2005	$100,000.00
48	Buried Man-Made Objects	12/15/2005	$50,000.00
Total for Baseline Contract Change Orders			**$12,107,527**

- The scope of work for CCO No. 36 was completed and compensated for under the larger scope of CCO No. 76.

SSD New Viaduct (1)

Progress of Work

Fabrication of the structural steel truss took place at Dongkuk S&C in South Korea. With the placement of traffic onto the detour, the construction of the Viaduct is substantially complete. Minor punch list work remains.

Status of Contract Change Orders: YBID New Viaduct:

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
49	LS	Stringer and Floor Beam Design Study	N/A	N/A	Executed 5/2/2006	$109,183	
49S1	FA	Truss Design Modifications (Changes to Stringer and Floor Beam Connections)	I&A 12/08/06	N/A	Executed 8/17/2006	$150,000	
49S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	$100,000	
Subtotal (CCO #49 and Supplements)						$359,182	
50	FA	Stand Alone Viaduct Design	N/A	N/A	Executed 5/8/2006	$325,000	$30,000
50S1	FA		I&A 9/21/06	N/A	Executed 10/16/2006	$300,000	
50S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	$100,000	
50S3	FA		I&A 2/09/07	N/A	Executed 2/13/07	$175,000	
50S4	FA		N/A	N/A	Executed 12/22/09	$30,000	
Subtotal (CCO #50 and Supplements)						$900,000	
54	LS	Deck Drainage	N/A	N/A	Executed 5/2/07	$8,000	
55	LS	Viaduct Fabricator Change (SGT Closeout)	I&A 7/08/07	Approved 6/27/07	Executed 8/7/07	$5,665,330	
55S1	LS	SGT Fabrication Closeout - Dongkuk Materials	I&A 1/24/08	Approved 3/5/08	Executed 3/17/08	$980,600	
59	LS	Water Blast Rebar Cages	N/A	N/A	Executed 2/22/07	$5,000	**$15,000**
59S1	LS	Additional funds, Water Blast Rebar Cages	N/A	N/A	Executed 11/24/08	$5,000	
59S2	FA	**Viaduct Rebar Cleaning**	**N/A**	**N/A**	**In Progress**	**$15,000**	
60	LS	Construction of Bent Caps	I&A 6/13/07	Approved 6/27/07	Executed 6/18/07	$7,435,950	
67	FA	Viaduct/ETI Interface Modifications (Design Cost)	I&A 5/14/07	N/A	Executed 9/27/07	$800,000	
79	LS	Fabrication Cost for Viaduct Design Changes July '05 - October '06	I&A 7/19/07	N/A	Executed 8/7/07	$803,400	
79S1	LS	Fabrication Cost for Viaduct Design Changes - July 05-Oct 06	I&A 6/13/08	N/A	Executed 8/4/08	$75,860	
80	LS	Erection Costs for Viaduct Design Changes through October 2006	N/A	Approved 1/31/08	Executed 2/20/08	$6,912,200	
82	FA	OGAC Paving and Expansion Dams	I&A 8/10/09	N/A	Executed 10/8/09	$547,680	$521,386
82S1	FA	Add funds AC Deck Grinding	I&A 12/17/09	N/A	Executed 12/22/09	$120,000	
213	LS	Bent 48 Expansion Joint & Drainage Escalation	I&A 7/23/09	N/A	Executed 8/06/09	$488,100	
85	LS	Design of 300mm Waterline Relocation	N/A	N/A	Executed 3/17/08	$12,480	
87	LS	Viaduct Shipping Escalation Costs	I&A 7/24/07	N/A	Executed 10/2/07	$534,570	
87S1	LS	Viaduct Shipping Escalation Costs	I&A 1/14/08	N/A	Executed 1/30/08	$200,000	
88	LS	Viaduct Fabrication Delays	I&A 7/19/07	N/A	Executed 8/7/07	$954,460	

88S1	LS	Viaduct Fabrication Delays	I&A 8/22/07	N/A	Executed 9/27/07	$776,630	
98	FA/LS	Viaduct Steel Storage and Handling Cost	I&A 5/30/08	N/A	Executed 6/18/08	$845,370	
98S1	FA	Add Funds Steel Storage and Handling Cost	I&A 12/17/09	N/A	Executed 12/22/09	$151,000	$151,000
99	LS	Viaduct Erection Costs (Post Oct. 2006)	I&A 4/17/08	N/A	Executed 5/22/08	$862,614	
100	FA	Viaduct Fabrication Costs (Post Oct. 2006)	I&A 1/22/08	N/A	Executed 1/28/08	$650,000	
105	FA/LS	Dongkuk Fabrication and Temp Bracing Fabrication Costs (July 2007 Plans)	I&A 4/2/08	Approved 4/3/08	Executed 4/17/08	$2,140,640	
106	-	CCO Voided…previous scope of work was incorporated into CCO 105	-	-	-	-	-
107	LS	Furnish and Drive Erection Tower Falsework Piles	I&A 8/07/08	N/A	Executed 10/02/08	$855,190	
111	FA/LS	USCG Parking Replacement and Protection	N/A	N/A	Executed 3/17/08	$163,223	
111S1	LS	Additional costs USCG Parking Lot	N/A	N/A	Executed 6/30/08	$8,940	
111S2	LS	Additional costs USCG Car Port Canopy	N/A	N/A	Executed 4/23/09	$120,000	$120,000
111S3	LS	Additional costs USCG Car Port Canopy	N/A	N/A	Executed 9/21/09	$80,000	$80,000
115	FA	Third VIA Shipping for CCO #67 July 07 plans	I&A 5/06/08	N/A	Executed 5/22/08	$850,000	
128	LS	60% of Waterline Relocation and Viaduct Connection Modifications	I&A 8/18/09	N/A	Executed 10/8/09	$533,123	($138,039)
128S1	LS	60 % of Waterline Design Mods and Impact Costs	N/A	N/A	Executed 1/20/10	$145,428	
215	FA	Underground Waterline Excavation Costs	N/A	N/A	Executed 10/8/09	$47,000	
133	-	Lightweight Conc. Mix Design Spec Change	N/A	N/A	Executed 9/12/08	$0	
134	LS	60% of Project Wide Electrical Changes	7/7/09	Approved 5/7/09	Executed 8/25/09	$1,380,554	
196	LS	Revised Electrical Lighting	N/A	N/A	Executed 7/28/09	$35,944	($174,056)
135	LS	Rebar Deck Escalation Costs	I&A 11/09/08	N/A	Executed 1/28/09	$995,100	
136	FA/LS	Provide additional alternate entrance access to USCG Base	N/A	N/A	Executed 9/23/08	$74,540	
136S1	FA/LS	Add Funds for access to USCG Base	N/A	N/A	Executed 1/6/09	$100,000	$100,000
136S2	FA/LS	Add Funds for access to USCG Base	I&A 3/27/09	N/A	Executed 3/30/09	$400,000	$400,000
136S3	FA/LS	Add Funds for access to USCG Base	I&A 9/22/09	N/A	Executed 3/30/09	$350,000	$350,000
138	LS	Waterline Relocation for Fire Hydrant (Conflicts with Span 49 Falsework)	N/A	N/A	Executed 9/22/09	$278,200	
148	FA	USCG Road Canopy below Viaduct	I&A 8/27/08	N/A	Executed 9/23/08	$500,000	
150	LS	Bent 52A Sewer Relocation	I&A 4/20/09	N/A	Executed 4/23/09	$242,330	$242,330
152	LS	Relocate USCG Road for steel erection FW Towers at Span 51	I&A 1/06/09	N/A	Executed 2/4/09	$336,420	
156	LS	Span 49 F/W Conflict w/ USCG Utilities	N/A	N/A	Executed 9/23/08	$180,820	
163	LS	Viaduct Grade Conflict	N/A	N/A	Executed 6/12/09	$83,202	($16,798)
173		**Deck Casting and Expansion Joint Escalation**		**TBD**	**In Progress**	**$1,000,000**	
178	LS	Type 7 Fence at Barrier	I&A 7/31/09	N/A	Executed 8/25/09	$457,356	$374,176
198	Credit/ LS	60 % of Job Wide Stripping Plan (Viaduct Portion)		N/A	Executed 12/14/09	$179,678	$89,678
199	Credit	CCO Deleted	-	-	-	-	($100,000)

201	LS	Viaduct Steel Erection USCG Protective Netting	N/A	N/A	Executed 10/8/09	$156,350	($73,650)
209	LS	Viaduct USCG Flagging & Delays (Span 51)	N/A	N/A	Executed 8/13/09	$92,810	($47,190)
210	LS	Steel Erection Close Out	N/A	N/A	Executed 1/20/10	$147,230	$22,230
226	**FA**	**Manhole Covers**	**N/A**	**N/A**	**In Progress**	**$30,000**	**$30,000**
235	FA	1/3rd of Detour Traffic Improvements	I&A 1/20/10	N/A	Executed 2/22/10	$100,000	$100,000
238	FA	Additional Scuppers	N/A	N/A	Executed 1/20/10	$100,000	$100,000
242		**Vertical Clearance Signing**	**N/A**	**N/A**	**In Progress**	**$30,000**	**$30,000**
Current Forecast for YBID New Viaduct						**$42,332,505**	**$2,206,067**

Budget Status

The Viaduct portion of the YBID was bid at $26.74M. The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be $9M. The June 2009 revised additional cost estimate is $40.1M with a current projection of $42.3M. CCOs executed to date are $41.3M.

West Tie-In **Phase 1** 2a

Progress of Work

Phase 1 work was substantially complete with the move in of the Structure on September 03, 2007. Miscellaneous electrical and drainage work remain. WB On-ramp reopened on August 8, 2008 and was subsequently re-closed on September 8, 2009 to accommodate the demolition of the old structure.

Status of Contract Change Orders: West Tie-In Existing Viaduct (Phase 1)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
58	FA	Bridge Removal Plan	N/A	N/A	Executed 11/21/06	$60,000	
58 S1	FA	Bridge Removal Plan	N/A	N/A	Executed 7/05/07	$40,000	
61	FA	Advance Engineering (Work Plans and Submittals), Site Prep (Ramp Closures, Access Road), Civil Work (Grading), Structure Work (Material Procurement)	I&A 1/09/07	N/A	Executed 2/27/07	$400,000	
61S1	LS/FA	Construction of Stage 1 Area and Substructure	I&A 5/16/07	Approved 6/27/07	Executed 5/18/07	$9,995,644	
66	FA	TMP – Video Equipment (WTI Phase 1)	N/A	N/A	Executed 7/20/07	$175,000	
68	FA	Temporary Electrical Work	N/A	N/A	Executed 7/20/07	$140,000	
68S1	FA	Temporary Electrical Work Stage 2, 3 &4	I&A 12/02/07	N/A	Executed 10/31/07	$510,000	
72	LS	Structure Work (Superstructure), and Temporary Shuttle Service	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	$11,096,900	
76	LS	Labor Day Bridge Demolition and Move-In	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	$2,240,300	
76S1	LS	Labor Day Bridge Move-In (Changeable Message Signs, Temporary Signs, Traffic Control, Bridge Removal, Bridge Move-In, Paving and Roadway Repairs, CCM Support Costs, City Traffic Officers)	I&A 8/28/07	Approved 8/24/07	Executed 9/27/07	$10,144,140	
84	LS	Skid Track Foundations and Temporary Columns	I&A 7/27/07	Approved 7/27/07	Executed 7/31/07	$3,980,000	
101	LS	Reconstruct Slab, West Bound On-ramp	I&A 4/02/08	N/A	Executed 4/17/08	$846,140	
101S1	LS	WB Onramp Supplemental Work	I&A 1/06/09	N/A	Executed 2/4/09	$149,560	

102	FA	Northside Drainage Work	N/A	N/A	Executed 4/4/08	$60,000	$46,578
102S1	LS	Northside Drainage Work	N/A	N/A	Executed 7/15/09	$48,818	
102S2	FA	Additional Northside Drainage Work	N/A	N/A	Executed 7/15/09	$50,000	
103	LS	Labor Day Weekend Closure Misc. Costs	N/A	N/A	Executed 2/20/08	$173,140	
urrent Status for West Tie-In (Phase 1)						**$40,109,642**	**$46,578**

Budget Status

The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be $40M. The June 2009 revised additional cost estimate is $40.1M with a current projection of $40.1M. CCOs executed to date are $40.1M.

West Tie-In **Phase 2** 2b

Progress of Work

With the placement of traffic onto the detour, Frames 1, 2, and 3 are substantially complete. Minor punch list work remains.

Status of Contract Change Orders: West Tie-In (Phase 2)

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
62	LS	Construction of Phase 2 Foundations and Credits for Elimination of Bid Items 12 and 90	I&A 2/29/08	Approved 4/4/08	Executed 4/7/08	($4,649,850)	
200	FA	Shoring at Abutment 47A	N/A	N/A	Executed 11/19/09	$50,000	($250,000)
71	LS	WTI Phase 2 Pile at Bent 46L/Slab Bridge Removal	I&A 7/24/07	N/A	Executed 7/20/07	$384,130	
108	LS	Substructure	I&A 6/20/08	Approved 6/18/08	Executed 6/25/08	$5,378,800	
117	FA	Surface Drainage (Southside)	N/A	N/A	Executed 1/6/09	$150,000	
128	LS	20% of Waterline Relocation and Stringer Stiffeners	I&A 8/18/09	N/A	Executed 10/8/09	$177,708	$71,654
128S1	LS	20 % of Waterline Design Mods and Impact Costs	N/A	N/A	Executed 1/20/10	$48,476	
134	LS	20% of Project Wide Electrical Changes	7/7/09	Approved 5/7/09	Executed 8/25/09	$460,185	
196	LS	Revised Electrical Lighting	N/A	N/A	Executed 7/28/09	$11,981	($58,019)
141	LS/FA	Superstructure Construction	I&A 11/13/08	Approved 11/18/08	Executed 11/25/08	$13,200,000	
141S1	ACUP	Superstructure Construction Completion Incentive (Release of Frame 1 Bent Cap FW)	I&A 5/15/09	Approved 5/15/09	Executed 5/15/09	$1,500,000	
143	LS/ID	Civil Work (EB Onramp and Mainline)	I&A 6/11/09	N/A	Executed 7/28/09	$156,436	**($3,618,566)**
143S1	**LS**	**Roadway AC Overrun**	**N/A**	**N/A**	**In Progress**	**$62,249**	
161	LS	T7-Line Detour	I&A 11/10/08	N/A	Executed 11/25/08	$403,965	
168	**LS**	**Rebar H.S. Rod Modifications**		**N/A**	**In Progress**	**$147,390**	**($221,010)**
208		**Concrete and Miscellaneous Changes**		**N/A**	**In Progress**	**$131,600**	
198	Credit/ LS	20% of Job Wide Stripping Plan (WTI Phase 2 Portion)		N/A	Executed 12/14/09	$59,893	($10,212)
202	--	WTI K-rail Deletion and ETI K-rail plans	N/A	N/A	Executed 11/4/09	($42,000)	($42,000)
220	LS	Flashing Becons and Additional Tunnel Lighting	N/A	N/A	Executed 11/19/09	$198,000	$198,000
221	FA	Barrier Rail Transition Cover Plate at B47		N/A	Executed 12/15/09	$25,000	$25,000

235	FA	1/3rd of Detour Traffic Improvements	I&A 1/20/10	N/A	Executed 2/22/10	$100,000	$100,000
243		**Falsework Delay**	**N/A**	**N/A**	**In Progress**	**$30,000**	**$30,000**
Current Status for West Tie-In (Phase 2)						**$17,983,963**	**($3,775,153)**

Budget Status

The Contractor's bid price for the West Tie-In was $9.0M. Based on the Department's December 14, 2006 Strategy Memorandum, the costs associated with the Phase 2 West Tie-In work were estimated to be an additional $13.0M. The June 2009 revised additional cost estimate is $21.8M, with a current projection of $18M. CCOs executed to date are $17.6M.

East Tie-In 3

Progress of Work

Bent 52A and skid bent foundation design packages were delivered October 2007. ETI design plans for the skid bents and skid beams were delivered March 15, 2008 and truss plans were delivered April 7, 2008.

Fabrication of the skid bents and skid beams took place at Thompson Metal Fab, Inc. in Vancouver, WA and the fabrication of the truss took place at Stinger Welding Inc. in Coolidge, AZ.

The existing SFPUC sanitary sewer pump station has been relocated with the new pump station up and running. The East Tie-In structure was successfully moved into place and traffic switch onto the detour on September 8, 2009.

Removal of the skid bent towers and beams is in progress.

Status of Contract Change Orders: East Tie-In

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
63	FA	Advance Engineering (Work Plans and Submittals)	I&A 8/22/07	N/A	Executed 9/27/07	$800,000	
69	LS	Procurement of Pump/Control Panel for Pump Station Relocation	N/A	N/A	Executed 10/10/07	$111,280	
69S1	LS	Construction for Pump and Control Panel for Relocated Pump Station	I&A 12/19/07	N/A	Executed 3/17/08	$499,996	
69S2	LS	Sewer Pump Electrical Changes	I&A 2/25/09	N/A	Executed 4/08/09	$8,953	
92	FA	ETI AT&T Fiber Optic Relocation	N/A	N/A	Executed 12/17/07	$175,000	
93	LS/FA	Lead Paint Mitigation Existing Truss (Span YB-4)	I&A 2/13/08	N/A	Executed 2/20/08	$563,725	($3)
93S1	LS	Additional Lead Abatement at Span YB-4	I&A 6/8/09	N/A	Executed 6/17/09	$347,417	
93S2	LS	Additional Platform Rental and Adjustments	I&A 10/5/09	TBD	Executed 10/8/09	$300,000	$300,000
104	LS	Pier E-1 Access Towers	N/A	N/A	Executed 1/30/08	$150,000	
104S1	LS	Additional Funds for Pier E-1 Access Towers	N/A	N/A	Executed 2/14/09	$45,000	$45,000
113	LS	Relocate Waterline in Conflict with Northern Skid Bent Footings	N/A	N/A	Executed 3/17/08	$167,990	
128	LS	20% of Waterline Relocation and ETI Exterior Stringer Stiffeners	I&A 8/18/09	N/A	Executed 10/8/09	$177,708	($128,346)
128S1	LS	20 % of Waterline Design Mods and Impact Costs	N/A	N/A	Executed 1/20/10	$48,476	
137	LS	Pump station Water Tank Demo	N/A	N/A	Executed 6/26/08	$114,490	
90	LS	Bent 52A and Skid Bent Footings and Credits for Eliminated Bid Items 10 and 42	I&A 3/26/08	Approved 4/4/08	Executed 4/14/08	$11,308,380	
97	FA	Bent 52A and Skid Bent Footing's Material Procurement	I&A 11/06/07	N/A	Executed 11/19/07	$850,000	

121	LS	Construct Stage 1 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/17/08	$142,670	
121S1	LS	Construct Stage 2 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/18/09	$518,130	
162	LS	Bent A3 Shoring	I&A 3/30/09	N/A	Executed 4/01/09	$268,235	
180	LS	Skid Bent Footing Backfill at A4-A6 and B4-B6	I&A 5/20/09	N/A	Executed 6/12/09	$237,000	
127	FA	RTU – 8 Service Platform	N/A	N/A	Executed 9/03/08	$75,000	
134	LS	20% of Project Wide Electrical Changes	7/7/09	Approved 5/7/09	Executed 8/25/09	$460,185	
196	LS	Revised Electrical Lighting	N/A	N/A	Executed 7/28/09	$11,981	($58,019)
129	LS	Skid Bent and Truss Steel Erection	I&A 11/05/08	Approved 11/10/08	Executed 11/25/08	$14,712,500	
129S1	LS	Skid Bent and Truss Steel Erection Acceleration	I&A 3/09/09	Approved 3/5/09	Executed 4/01/09	$535,000	
129S2	LS	Skid Bent and Truss Steel Erection Incentive	I&A 6/9/09	Approved 6/4/09	Executed 6/17/09	$1,177,000	
179	LS	ETI Truss Steel Erection Falsework Foundations	I&A 4/20/09	N/A	Executed 4/08/09	$312,000	
234	LS	ETI Skid Bent/Beam Erection Interferences and Guy Cables	N/A	N/A	Executed 1/20/10	$54,120	
236	LS	ETI Truss L8 North FW Redesign (Burried Man Made Object)	N/A	N/A	Executed 1/20/10	$23,940	**$899,940**
181		**Skid Bent/Beam and Truss Erection Support**		**N/A**	**In Progress**	**$500,000**	
206	LS	Skid Bent Steel Erection Closeout Costs	N/A	N/A	Executed 1/20/10	$176,670	
214	LS	ETI Truss Steel Erection Closeout Costs		N/A	Executed 1/20/10	$645,210	
112	FA	Material Procure Skidbent (1532 Tower Legs)	I&A 1/10/08	Approved 2/4/08	Executed 2/19/08	$2,000,000	
112S1	FA	Material Procure ETI Superstructure	I&A 3/03/08	Approved 3/5/08	Executed 3/17/08	$8,500,000	
112S2	FA	Material Procure ETI Temporary Bypass Structure	I&A 6/04/08	Approved 6/16/08	Executed 6/25/08	$3,500,000	
112S3	FA	Material Procure - Additional Funds	I&A 10/31/08	Approved 11/13/08	Executed 11/25/08	$3,000,000	
112S4	FA	Material Procure - Additional Funds	I&A 7/7/09	Approved 7/15/09	Executed 7/16/09	$1,500,000	
116	FA/LS	Fabricate Superstructure & Skidbent	I&A 6/04/08	Approved 6/16/08	Executed 8/8/08	$14,166,180	
116S1	FA/LS	Skidbeam Design Modifications and Shipping Costs	I&A 12/19/08	Approved 12/23/08	Executed 2/3/09	$1,896,750	$249,560
116S2	FA/LS	Skidbeam Design Modifications and Shipping Costs	I&A 7/7/09	Approved 7/15/09	Executed 7/16/09	$300,000	
140	LS	Truss Steel Fabrication	I&A 9/04/08	Approved 9/04/08	Executed 9/23/08	$10,920,525	
140S1	ACUP	Truss Fabrication Incentive	I&A 6/17/09	Approved 9/04/08	Executed 7/6/09	$300,000	
166	LS	Skid Bent & Beam Fabrication Acceleration	I&A 12/22/08	Verbal Approval 11/06/08 Approved 12/23/08	Executed 1/28/09	$2,028,950	
166S1	ACUP	Skid Bent & Beam Fabrication Incentive	I&A 5/15/08	Approved 12/23/08	Executed 5/15/09	$900,000	
167	LS	TMF – Shop Drawing Delay	I&A 3/16/09	N/A	Executed 5/6/09	$632,670	
184	LS	Truss Design Modifications and Acceleration Costs (Partial Payment)	I&A 5/20/09	Approved 6/4/09	Executed 6/12/09	$3,000,000	
184S1	LS	Truss Design Modifications and Acceleration Costs (Partial Payment)	I&A 7/31/09	Approved 8/6/09	Executed 8/11/09	$4,393,420	
187	FA	Temporary Bracing for Truss Exterior Stringers	N/A	N/A	Executed 7/16/09	$150,000	

193	LS	Skid Beam Design Modifications	I&A 7/7/09	N/A	Executed 7/16/09	$256,140	
144	FA	Expansion Joint Mock-up	I&A 8/26/08	N/A	Executed 9/23/08	$850,000	
144S1	FA	Expansion Joint Fabrication	I&A 2/03/08	Approved 2/5/09	Executed 4/06/09	$2,900,000	$1,000,000
144S2	-	Revised Expansion Joint Plan Sheets	N/A	N/A	Executed 8/05/09	$0	
144S3	FA	Additional Funds for Expansion Joints		Approved 11/5/09	Executed 11/24/09	$1,000,000	
231	FA	Expansion Joint Steel Skid Test Plates	N/A	N/A	Executed 12/15/09	$100,000	$100,000
233	LS/FA	Expansion Joint Skid Resistant Treatment	N/A	N/A	Executed 11/17/09	$106,915	$106,915
149	FA	Bearing Fabrication	I&A 11/03/08	Approved 11/10/08	Executed 11/25/08	$1,600,000	$400,000
149S1	FA	Additional FA Funds for Bearing Fabrication / Testing	I&A 10/15/09	N/A	Executed 11/19/09	$400,000	
153	LS	Concrete Deck and barrier starter steel	I&A 6/23/09	Approved 6/4/09	Executed 7/6/09	$2,389,940	($378,266)
154	LS	East Pile Deduct at BW6, East Pile	N/A	N/A	Executed 9/04/08	($400)	
154S1	LS	Pile Anomaly Deduction at A6W & B52A	N/A	Approved 11/13/08	Executed 11/25/08	($2,183)	
160	FA	Existing Truss Retrofit Fabrication	I&A 4/20/09	N/A	Executed 4/08/09	$350,000	
170	LS	Existing Truss Strengthening Erection YB-4	I&A 7/31/09	N/A	Executed 10/08/09	$413,600	($336,400)
175	LS	Existing Truss Strengthening Erection Stability Bracing at YB 3	I&A 7/22/09	N/A	Executed 8/13/09	$311,144	($188,856)
164	LS	ETI Steel Erection Crane Runway Trestle	I&A 11/20/08	ATP 11/14/08 Approved 12/23/08	Executed 12/6/09	$2,700,000	
169	LS	Skid Beam Jobsite Handling and Local Transportation Costs	I&A ½/09	Approved 12/23/08	Executed 2/25/09	$1,095,020	
171	LS	Bridge Roll Out / Roll In	I&A 6/8/09	Approved 6/4/09	Executed 6/17/09	$10,147,370	($328,820)
172	LS	Lead Paint Abatement and Access at YB-3	I&A 12/18/08	N/A	Executed 2/4/09	$210,450	
174	FA	ETI Steel Barrier Rail Transition Fabrication	I&A 5/20/09	N/A	Executed 6/17/09	$350,000	$150,000
174S1	--	ETI Steel Barrier Rail Transition Fabrication Design Changes	N/A	N/A	Executed 11/4/09	$0	
174S2	FA	ETI Steel Barrier Rail Transition Fabrication	I&A 11/5/09	N/A	Executed 11/4/09	$150,000	
177	LS	Span YB-4 Demolition	I&A 9/17/09	Approved 9/2/09	Executed 10/12/09	$11,249,560	$2,007,276
217	LS	Skid Bent Demolition	I&A 10/14/09	Approved 9/18/09	Executed 11/19/09	$3,152,900	
212	LS	YB4 Roll Out Cut Free Demolition	I&A 9/2/09	N/A	Executed 10/08/09	$209,720	
227		**ETI Backfill**		**TBD**	**In Progress**	**$1,000,000**	
186	LS	TMP (Lane Closures and CMS)	***	Approved 6/4/09	Executed 8/25/09	$2,390,910	($609,090)
198	Credit/ LS	20% of Job Wide Stripping Plan (ETI Portion)		N/A	Executed 12/14/09	$59,893	$11,478
235	FA	1/3rd of Detour Traffic Improvements	I&A 1/20/10	N/A	Executed 2/22/10	$100,000	$100,000
	-	**ETI OGAC on Bridge Deck**		**TBD**	**Future**	**$0**	
		District work – road signage, stage construction, SWPPP, Temp k-rail, etc		**TBD**	**Future**	**$268,125**	
204	FA	CCM's Labor Day Support Costs Expansion Joint Seal Installation (previously CCO 189)	I&A 7/14/09	Approved 7/15/09	Executed 8/6/09	$3,500,000	

		ETI Steel Barrier Rail Transition Installation (previously CCO 190)					
		Stability Bracing at YBI (Previously CCO 175)					
		Bearing Installation (Previously CCO 191)					
		Barrier Rail Installation (CCO 202 transmitted plans)					
204S1	**FA**	**Additional Funds (If needed)**		**TBD**	**Future**	**$2,500,000**	**$1,100,000**
216	FA	Pier E1 Barrier Rail Supports	N/A	N/A	Executed 10/08/09	$175,000	$175,000
225	FA	Steel Double Handling Costs	I&A 9/17/09	N/A	Executed 10/08/09	$500,000	$500,000
207	FA	Field Design Modifications Truss – Fabrication (U1, U8, L1, L8)	I&A 7/16/09	N/A	Executed 7/28/09	$400,000	($874,590)
207S1	FA	Additional Funds to Field Design Modifications Truss – Fabrication (U1, U8, L1, L8)	N/A	N/A	Executed 10/27/09	$100,000	
219	LS	Field Design Modifications Truss – Erection (U1, U8, L1, L8)	I&A 10/8/09	N/A	Executed 11/19/09	$625,410	
Current Status for East Tie-In						**$144,266,065**	**$4,242,779**

Budget Status

The Contractor's bid price to construct the Contractor's design for the East Tie-In was $6.0M with an additional $1.46M to demolish the remaining portion of the ETI YB-4 span. The Department's December 14, 2006 Strategy Memorandum estimated an additional cost of $34.0M to construct the Department's ETI roll out/roll in design concept. At the time, this estimate was based on minimal design information available. The June 2009 revised additional cost estimate is $140.0M, with the current projection at $144.3M. CCOs executed to date are $140M.

Yerba Buena Island Transition Structures Advance Foundations

4

Progress of Work

The YBITS foundation and column locations being advanced are W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, W7 Ramp and the temporary E.B. onramp abutment.

W3 3L – substantially completed
3R – column (2nd lift of 2) in progress
W4 4L – substantially completed
4R – substantially completed
W5 5L – 75 of 140 piles driven
5R – excavation and installation of shoring in progress
W6 6L – substantially completed
6R North – column (2nd lift of 2) in progress
6R South – substantially completed
W7 construction of the temporary soil nail wall and soldier pile shoring complete
7L North – substantially complete
7L South – substantially completed
7R – column (2nd lift of 2) in progress
Ramp – substantially completed
EB On-ramp abutment – temporary shoring piles and permanent CIDH piles have been installed

Demolition of the main portion of the old structure (Bent 48 to YB4) is in progress.
Demolition of the old YB-3 span is complete.
Demolition of the old YB-1 and YB-2 spans are in progress.

Status of Contract Change Orders: YBI Transition Structures Advance Foundations

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
64	FA	YBITS W3L Site Prep and Grading and Construct Access Road	N/A	N/A	Executed 1/8/07	$150,000	

64S1	LS/FA	YBITS W3L Foundation and Column to Splice Zone, Integrated Shop Drawings for W3L, Concrete Washouts, 50% of Flagging, and Traffic Controls	I&A 3/13/07	Approved 2/15/07	Executed 4/4/07	$5,835,000	
65	FA	Demo Exist Bridge Adv. Planning	N/A	Approved 4/14/08	Executed 4/18/08	$175,000	$11,540
65S1	LS	Demolish Exist Bridge (Bent 48 to YB-4)	I&A 4/06/09	Approved 5/7/09	Executed 5/21/09	$9,227,660	
192	LS	Cable Bracing requires for Demolition of Spans YB-1, YB-2, and YB-3	N/A	N/A	Executed 8/13/09	$111,540	
229	FA	Maintenance Traveler Salvage	N/A	N/A	Executed 12/14/09	$100,000	
70	FA	Integrated Shop Drawings for Remaining YBITS Advance Locations (W3R, W4L/R, W5L/R, W6L/R, W7L/R, and W7 Ramp)	I&A 4/04/07	N/A	Executed 5/1/07	$500,000	
70S1	FA	YBITS Advance – ISD 3R, 4R/L, 5R/L, 6R/L, 7R/L & ramp	I&A 1/17/08	N/A	Executed 1/30/08	$450,000	
73	LS	YBITS W3R, W4R, W5R/L, W6R/L, and W7 Ramp Foundations and Columns	I&A 10/24/07	Approved 10/30/07	Executed 11/19/07	$62,958,990	
75	LS	YBITS W7R/L Foundations and Columns	I&A 4/2/08	Approved 4/3/08	Executed 4/14/08	$13,125,000	**($697,560)**
75S1	LS	Bent W7 Structure Backfill	I&A 7/7/09	Approved 7/15/09	Executed 7/31/09	$910,810	
241		**Bent W7 Drainage Modifications**		**N/A**	**In Progress**	**$141,630**	
77	LS	YBITS W4L Foundations and Columns	I&A 6/13/07	Approved 7/27/07	Executed 7/20/07	$7,125,000	
78	FA	Relocation of Sewer Force Main	N/A	N/A	Executed 7/17/07	$125,057	
94	LS	YBITS Temp. EB Onramp Abutment Piles and Shoring	I&A 5/18/09	N/A	Executed 5/21/09	$153,593	($246,407)
118	FA	Vibration & Elev. Monitoring at W5L	N/A	N/A	Executed 2/20/08	$50,000	**$290,000**
118S1	FA/LS/ID	Nimitz House vibration monitoring	N/A	N/A	Executed 8/05/08	$50,050	
118S2	FA	Nimitz House vibration monitoring	N/A	N/A	Executed 12/14/09	$40,000	
118S3	**FA**	**Nimitz House vibration monitoring**	I&A 2/16/10	**N/A**	**In Progress**	**$250,000**	
120	LS/Credit	CIDH Pile Mitigation Deduct	N/A	N/A	Executed 3/17/08	($400)	
124	FA/LS	Seismic Monitoring & Column Grounding	I&A 10/16/08	N/A	Executed 11/25/08	$353,975	
126	FA	YBITS Excavation / Hazmat Disposal	I&A 4/7/08	Approved 4/3/08	Executed 4/17/08	$500,000	
145	-	Revised Mass Concrete Spec. (Elimination of requirement from CCO's 73 & 75)	7/22/09	N/A	Executed 8/25/09	$0	**($157,730)**
145S1	**Credit**	**Credit for eliminated Mass Concrete Work**		**Current**	**In Progress**	**($657,730)**	
147	LS	Add Cost W4R Foundation Construction	N/A	N/A	Executed 7/21/08	$25,024	
155	FA	Excess Soil Offhaul	I&A 8/13/08	N/A	Executed 9/03/08	$500,000	
159	LS	Redesign Bent W7 Soil Nail Wall	I&A 11/10/08	N/A	Executed 5/21/09	$916,280	
165	LS	W7 Soil Nail Wall Delay Costs	I&A 4/20/09	N/A	Executed 4/08/09	$152,208	
185	FA/ID	HazMat Excavation for Bridge Removal	8/10/09	N/A	Executed 8/25/09	$106,000	$106,000
211	LS	Duct Bank Revisions	N/A	N/A	Executed 8/13/09	$129,152	$34,772
232	LS/FA	Duct Bank Footing Removal & Drain Rock	N/A	N/A	Executed 11/19/09	$105,620	
Current Status for YBI Transition Structures Advance Foundations						**$103,609,459**	**($659,385)**

Budget Status

The Department's December 25, 2006 Strategy Memorandum estimated the cost to construct Bents W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, and W7 Ramp to be $107M. In addition, the temporary E.B. onramp abutment shoring was added at a later date with no estimate revision. The Departments December 14, 2006 Strategy Memorandum estimated the additional demolition costs for the existing bridge (Bent 48 through YB-4) to be

$3.5M. The combined estimate for both was $110.5M. The June 2009 revised additional cost estimate is $104.3M with a current projection of $103.6M. Total CCOs executed to date are $103.9M.

Administrative Issues General CCOs 5

Progress of Work

Administrative issues that remain on the YBID contract are related to setting project milestones and determining time related overhead resulting from the contract time extensions, escalation costs, the increased scope of work, and other necessary changes to the contract.

The following list of target milestones has been incorporated into the project schedule. This information will be revised as more detailed schedule information is developed.

	Date	Status	Notes
W3L (foundation and column up to splice zone)	March 15th, 2007	Complete	Finished 3/15/07
West Tie-In Phase 1 Viaduct Demo/Roll-In Complete	September 4th, 2007	Complete	Finished 9/04/07
Access to W3R Available to CCM	January 2nd, 2008	Partial access provided	Coordinating access with SAS
Upper East Tie-In Area Available to CCM (Revised October 2008)	December 2009	Partial access provided	Coordinating access with SAS
East Tie-In Roll-Out/Roll-In Complete (Revised October 2008)	September 7th, 2009	Complete	Finished 9/8/09
Project Completion (Revised July 2009)	December 10, 2010		

The Department has extended TRO compensation at the original contract rate through December 10, 2010. The Contractor has completed a TRO audit. The Department is reviewing this information so that an appropriate TRO adjustment can be negotiated.

The Department continues to pursue a resolution to the remaining NOPC issues. Of the 18 NOPC issues, only three remain outstanding. Of the three it is anticipated that Viaduct CCO #128 will resolve NOPC #6, resolution of the existing structure demolition costs will resolve NOPC #15, and resolution of the TRO costs will resolve NOPC #18.

Status of Contract Change Orders: Administrative Issues

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from June 09 Approved Budget
1 S2	FA	Flagging & Traffic Control	N/A	N/A	Executed 12/5/07	$200,000	
1S3	FA	Flagging & Traffic Control	N/A	N/A	Executed 7/2/08	$300,000	
1S4	FA/LS	Flagging & Traffic Control	N/A	N/A	Executed 7/9/09	($57,580)	($57,580)
1S5	**FA**	**Flagging & Traffic Control**	I&A 2/16/10	**N/A**	**In Progress**	**$250,000**	**$250,000**
8S1	**FA**	Add Funds for SWPPP Maint Sharing	N/A	N/A	12/14/09	$25,000	$25,000
11S1	**FA**	Add Funds for Utility Potholing	N/A	N/A	12/14/09	$25,000	$25,000
13S1	FA	PMIV Additional Funds	I&A 3/10/08	N/A	Executed 3/17/08	$300,000	
39S1	FA	Additional Funds for Shuttle Service to USCG	I&A 3/18/09	N/A	Executed 3/30/2009	$500,000	**$200,000**
39S2	**FA**	**Additional Funds for Shuttle Service to USCG**		**N/A**	**In Progress**	**$200,000**	
45 S1	LS	Additional SWPPP	I&A 12/14/07	N/A	Executed 1/31/08	$350,000	
51	LS	NOPC 12 & 13 Resolution	N/A	N/A	Executed 8/17/06	$25,234	
52	0	Elimination of Contractor's Design of Tie-Ins	I&A 1/19/07	N/A	Executed 3/2/07	$0	
53	FA	Handling and Storage of Material	I&A 11/06/06	N/A	Executed 12/8/06	$240,000	
56	LS	Contractor's Design additional cost… Resolved NOPCs 2,3,4,8,9,10,11,14, and 16	I&A 2/20/08	Approved 3/5/08	Executed 3/17/08	$6,837,310	

57	LS	Demolition of Building 206	N/A	N/A	Executed 10/18/06	$22,378	
57S1	LS	Remove and Clear Building 254	N/A	N/A	Executed 6/4/07	$10,572	
66S1	FA	Video/Photo Documentation Services Supplemental Funds	N/A	N/A	Executed 4/14/08	$200,000	
66S2	FA	Video/Photo Documentation Services Supplemental Funds	I&A 9/17/09	N/A	Executed 9/22/09	$200,000	
86	LS	Additional Suspension Costs	N/A	N/A	Executed 5/19/08	$42,764	
91	LS	Contract Days Extension/TRO Compensation to November 08	RPP 8/28/07	TBD	Executed 10/31/07	$1,818,948	
91 S1	LS	Base Contract TRO Extension to September 1, 2009	I&A 10/25/07	Approved 10/30/07	Executed 11/16/07	$8,463,159	
91 S2	LS	Base Contract TRO Extension to December 10, 2010	I&A 9/2/09	Approved 7/15/09	Executed 10/08/09	$5,494,737	
114		Global TRO Audit	N/A	N/A	Executed 1/20/10	$30,000	
		Global TRO Adjustment		**TBD**	**In Progress**	**$6,475,263**	
96	FA	SWPPP Steep Slope Stabilization Measures	N/A	N/A	Executed 1/4/08	$190,000	
96S1	FA	Add Funds Shotcrete Slope at Bent 48	N/A	N/A	Executed 7/2/08	$40,000	
109	FA	MEP Coordination	N/A	N/A	Executed 1/30/08	$100,000	
110	FA	Geotech. Exploration Pads and Support	N/A	N/A	Executed 2/20/08	$150,000	
119	FA/LS/ID/ UP	Project Wide SWPPP	I&A 4/07/08	N/A	Executed 4/17/08	$638,939	
119S1	FA	Project Wide SWPPP (Additional Funds)	I&A 9/2/09	N/A	Executed 9/3/09	$300,000	$300,000
119S2	FA	Project Wide SWPPP (Additional Funds)	I&A 12/17/09	Approved 12/5/09	Executed 12/21/09	$850,000	$850,000
123	FA	Treasure Island Yard Lot Rental	I&A 4/16/08	N/A	Executed 4/17/08	$600,000	$350,000
123S1	FA	Additional Funds for Treasure Island Yard Lot Rental	I&A 10/8/09	N/A	Executed 10/26/09	$350,000	
125	FA	Project Access Paving	N/A	N/A	Executed 4/04/08	$150,000	$100,000
125S1	FA	Additional Funds, Project Access Paving	I&A 6/12//08	N/A	Executed 6/25/08	$35,000	
125S2	FA	Additional Funds, Project Access Paving	I&A 4/20/09	N/A	Executed 4/23/09	$100,000	
130	LS	Project Retention	I&A 4/07/08	N/A	Executed 4/14/08	$136,510	
131	FA	Delete Permanent Erosion Control Items	N/A	N/A	Executed 5/6/09	($74,502)	
132	LS	Storm Damage Slope Repair (Resolved NOPC 17)	N/A	N/A	Executed 5/23/08	$23,870	
139	-	Revised ESA's	N/A	N/A	Executed 5/23/08	$0	
142	FA	Macalla Road Sinkhole Repair	N/A	N/A	Executed 7/18/08	$150,000	
146	FA	Macalla Road Tree Trimming	N/A	N/A	Executed 7/21/08	$50,000	**$80,000**
146S1	FA	Add Funds Macalla Road Tree Trimming	N/A	N/A	Executed 11/25/08	$50,000	
146S2	**FA**	**Add Funds Macalla Road Tree Trimming**	**N/A**	**N/A**	**In Progress**	**$80,000**	
151	-	Public Safety Spec Change (Suspended Load)	N/A	N/A	Executed 9/23/08	$0	
157	FA	USCG Access Mitigation Stairway Design to Quarters Above		N/A	Executed 1/28/09	$150,000	
176	FA	Construction Staking	N/A	N/A	Executed 4/08/09	$100,000	
		Non CCO Charges…COZEEP, lead survey, respirator training (Q48)			**In Progress**	**$1,323,000**	

182	FA	USCG use parking lots at WTI area Quarters 8		N/A	Executed 1/20/10	$180,000	$100,000
182S1	**FA**	**USCG use parking lots at WTI area Quarters 8, additional parking and revised plans**		**N/A**	**In Progress**	**$220,000**	
188	-	Sound Control Requirements, pile driving restrictions (Specification Only)	6/23/09	N/A	Executed 8/25/09	**$142,500**	**$42,500**
188S1	**LS**	**Sound Control Impacts to W6 & W7 Pile Driving**		**N/A**	**In Progress**		
195	FA	USCG Stair Access to Quarters 9 along Goat Slope	7/31/09	N/A	Executed 8/25/09	$500,000	**$150,000**
195S1	**FA**	**USCG Stairway additional funds**		**N/A**	**In Progress**	**$450,000**	
203	LS	SSD Base Camera's	N/A	N/A	Executed 10/08/09	$196,884	($503,116)
-	-	Permanent Gawk Screen on North Side Detour Rail – CCO Deleted				$0	($200,000)
		PIO Office Labor Day Outreach		**N/A**	**In Progress**	**$200,000**	
		Macalla Road Repairs		**N/A**	**In Progress**	**$200,000**	
224	FA	Treasure Island Material Storage Yard	I&A 9/17/09	N/A	Executed 10/08/09	$400,000	$400,000
230	FA	USCG Shuttle for WB Onramp Closure	I&A10/29/09	N/A	Executed 11/19/09	$600,000	$600,000
237	**LS**	**Temporary Trestle Extended Rental**		**N/A**	**In Progress**	**$267,510**	**$267,510**
239		**Truck accident Clean up(11-9-09)**		**N/A**	**In Progress**	**$55,263**	**$55,263**
240	**LS**	**Mainline Night Lane Closures**	**I&A1/26/10**	**N/A**	**In Progress**	**$948,040**	**$1,246,980**
240S1	**LS**	**Additional Night Lane Closures**		Approved 2/11/10	**In Progress**	**$298,940**	
Current Status for Administrative and General CCOs						**$42,104,739**	**$4,281,557**

Budget Status

As of June 2009 the revised additional cost estimate for Time Related Overhead, escalation issues, and job wide changes is $37.8M with the largest estimated cost being attributed to a global TRO adjustment. As Contract Change Orders for these items are negotiated, this estimate will be updated. Costs related to settlement of NOPC issues not captured here will be paid out of the contract contingency.

Total CCOs executed to date are $31M.

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 4a

Item- Progress Reports
Draft Project Progress and Financial Update February 2010

Recommendation:
For Information/ **APPROVAL** Confirmation

Cost:
N/A

Schedule Impacts:
N/A

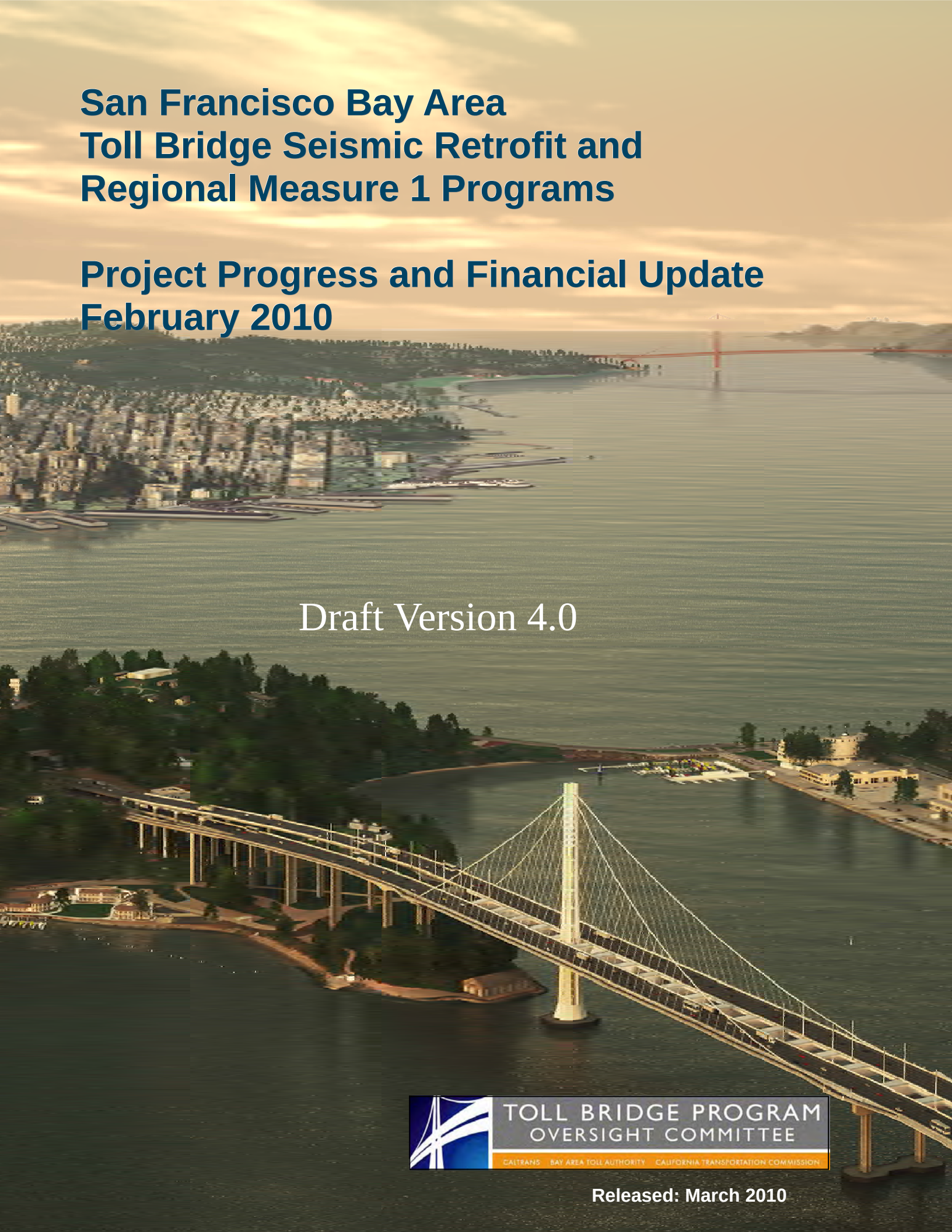
Discussion:
Included in this packet is a draft Project Progress and Financial Update February 2010. By meeting time, the final version will have been approved by the PMT, through delegated TBPOC authority, and distributed on March 2, 2010. The PMT requests TBPOC confirmation of this approval.

Attachment(s):
Draft Project Progress and Financial Update February 2010 (see end of binder)

San Francisco Bay Area Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

Project Progress and Financial Update February 2010

Draft Version 4.0

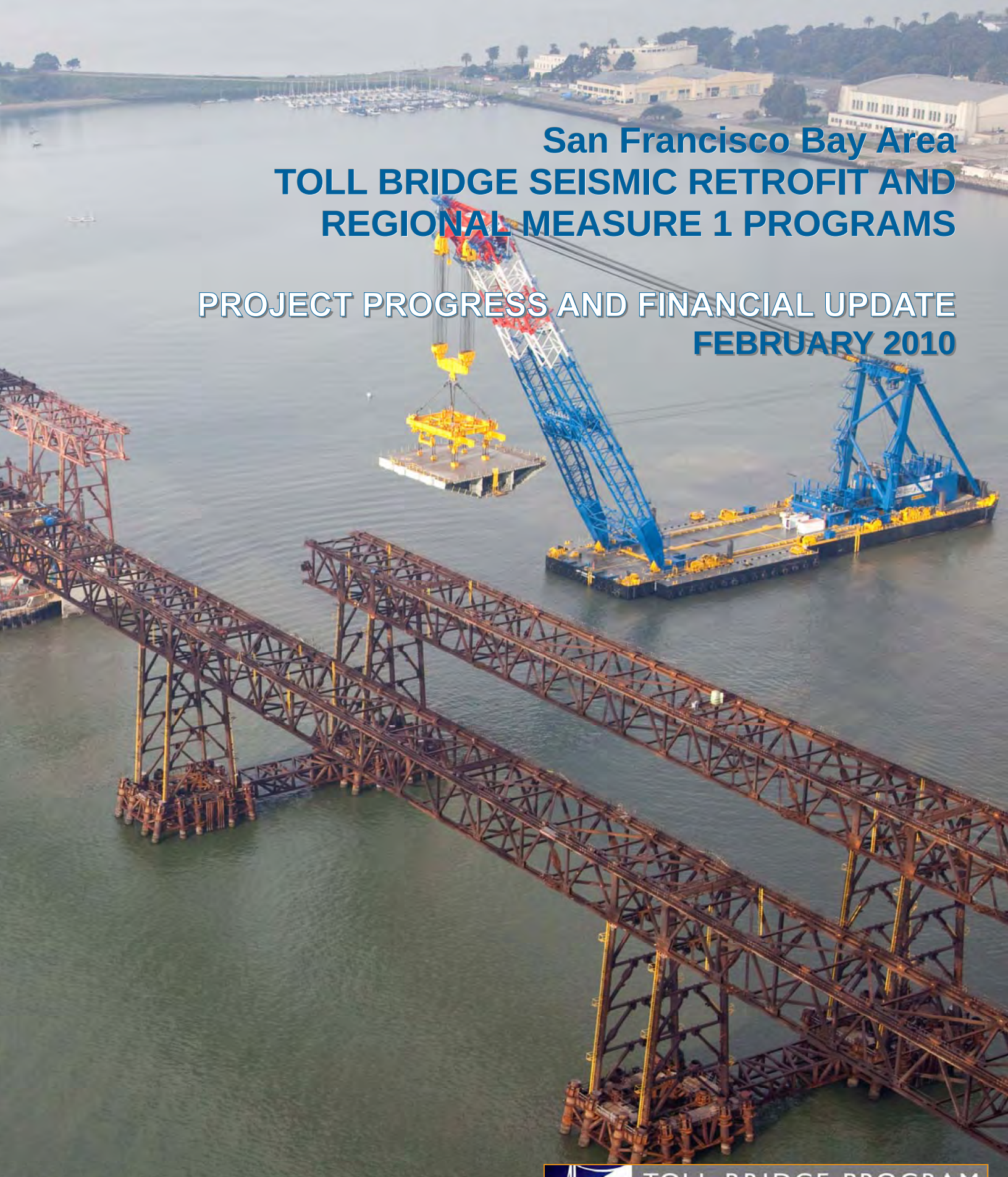


TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Released: March 2010

Aerial View of Existing East Span Bridge Looking towards Yerba Buena Island



San Francisco Bay Area
TOLL BRIDGE SEISMIC RETROFIT AND REGIONAL MEASURE 1 PROGRAMS

PROJECT PROGRESS AND FINANCIAL UPDATE
FEBRUARY 2010

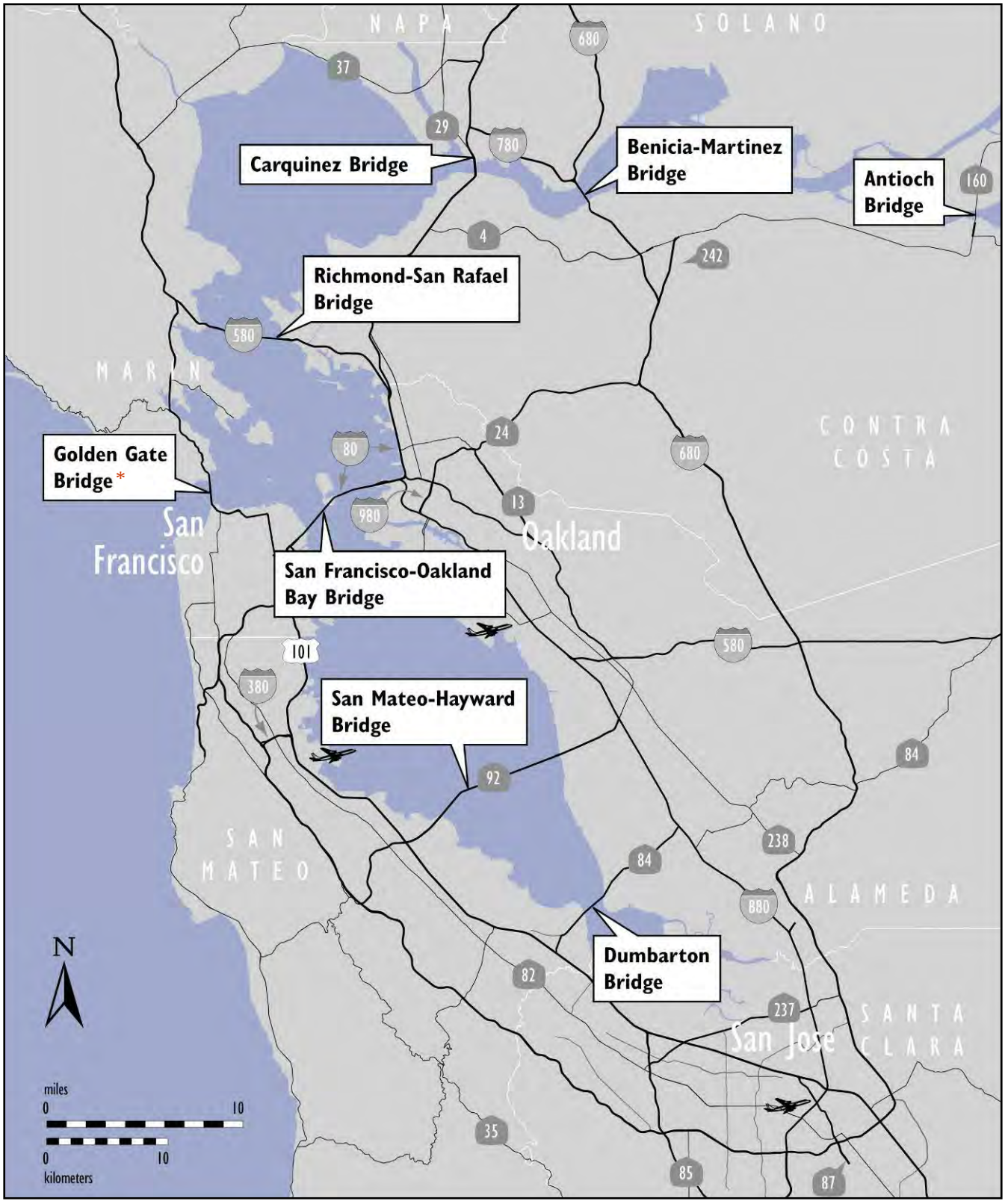
TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Ariel View of completed Skyway, Temporary Support Structures, Shear-Leg Crane Barge Looking towards Yerba Buena Island

Table of Contents

Map of Bay Area Toll Bridges



* The Golden Gate Bridge is owned and operated by the Golden Gate Bridge, Highway, and Transportation District.

Introduction

In July 2005, Assembly Bill (AB) 144 (Hancock) created the Toll Bridge Program Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge and State Toll Bridge Seismic Retrofit Program projects. The TBPOC consists of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC). The TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of $1 million (as defined by the Committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
1958 Carquinez Bridge Seismic Retrofit	Complete
1962 Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects called the Regional Measure 1 (RM1) Toll Bridge Program under the responsibility of BATA and Caltrans. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans will continue to report on their progress as an informational item. The RM1 program includes:

Regional Measure 1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Construction
1962 Benicia-Martinez Bridge Reconstruction	Open
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS

SAS OBG Lift 1E and 2E on the Eastbound Temporary Support Structure

SAS - Eastbound and Westbound Temporary Support Structures Looking East

SAS OBG Lift 3 E on the Move

Toll Bridge Seismic Retrofit Program Risk Management

A major element of the 2005 AB144, the law creating the TBPOC, was legislative direction to implement a more aggressive risk management program. Such a program has been implemented in stages over time to ensure development of a robust and comprehensive approach to risk management. We have reached a milestone with our risk management program with all elements now fully incorporated, resulting in one of the most detailed and comprehensive risk management programs in the country today.

A comprehensive risk assessment is performed for each project in the program. Based upon those assessments, a forecast is developed using the average cost of risk. These forecasts can both increase and decrease as risks are identified, resolved or retired. Nonetheless, we want to ensure that the public is informed of the risks we have identified and the possible expense they could necessitate.

Based upon the Fourth Quarter 2009 Risk Management Report, we have identified a range from $550 - $850 million in risks to the program contingency, which is unchanged from the last quarter. It is important to note that our $758.3 million budgeted program contingency is sufficient to cover the risks to an 80 percent confidence level. We will continue to work on mitigating these risks to reduce the potential draw on contingencies. Further details on identified risks are included in the contract summaries.

San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Replacement Project

SAS Superstructure Contract

The prime contractor constructing the Self-Anchored Suspension Bridge from the completed Skyway to Yerba Buena Island is a joint venture of American Bridge/Fluor (ABF). The primarily steel bridge is being fabricated around the world in components. Temporary steel structures have been and are continuing to be erected in the San Francisco Bay to support the new bridge during construction.

The contractor has reported that fabrication of the steel tower and roadway boxes has fallen 15 months behind

SFO Bay Bridge East Span Detour Structure Completed over the Labor Day Weekend

schedule due to the complexity of the design and fabrication. The first shipment of roadway boxes (lifts 1 through 4) were shipped on December 30, 2009, while the first tower segments are not expected until the late spring of 2010. The first four eastbound roadway boxes have been lifted into place (see status on page 28).

All components have undergone a rigorous quality review by Shanghai Zhenhua Heavy Industry Co. Ltd. (ZPMC), ABF, and Caltrans to ensure that only bridge components that have been built in accordance to the specifications will be shipped.

On the critical path to completing the bridge is the fabrication of the last two roadway sections at the east end of the new span (Segments 13 and 14). Starting fabrication of these segments has fallen behind schedule due to delays in the fabrication drawing preparation process. The TBPOC has taken steps to ensure completion of the shop drawings by March of 2010. These delays will likely preclude the westbound opening of the bridge in 2012, but we continue to push for full opening of the bridge in 2013.

Caltrans has established risk management teams to evaluate these challenges and to identify future potential risks to completing the project on time and on budget. In particular, teams are reviewing cable-erection plans and mitigation actions. Based on the latest risk management assessment, there is a potential for a $194 million increase on the SAS contract.

Yerba Buena Island Detour Contract

The Yerba Buena Island Detour contractor, C.C. Myers, has rolled out the existing bridge span and rolled in the new east tie-in span of the detour structure that diverts traffic off the existing bridge to the detour structure that now ties into the Yerba Buena Island Tunnel. The traffic switch occurred as scheduled on Labor Day weekend. The contractor continues to make progress on a number of accelerated foundations for the future transition structure from the Self-Anchored Suspension (SAS) bridge to the tunnel. Work is ongoing on the demolition of the old viaduct to make way for the Yerba Buena Island Transition Structures #1 contract.

Yerba Buena Island Transition Structures #1 Contract

On February 4, 2010, Caltrans awarded the Yerba Buena Island Transition Structures #1 (YBITS#1) Contract to MCM Construction, Inc. Construction work will start when the YBID contractor has completed demolition of the old viaduct structure. MCM Construction, Inc. is also the firm constructing the Oakland Touchdown #1 contract.

SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS

Oakland Touchdown #1 Westbound and Eastbound Strudctures Overview Looking East

Oakland Touchdown #1 Exterior View of Mole Substation

Dumbarton/Antioch Bridges Mock-Up of Dumbarton Pier Columns Undergoing Seismic Testing

Oakland Touchdown #1 Contract

The Oakland Touchdown (OTD) #1 contractor, MCM, continues to be on schedule with a projected completion date of May 2010 and has opened construction access on the new westbound OTD structure to the Skyway. Work continues on the eastbound structure.

TBSRP Capital Outlay Support

Based on initial discussions with our contractors, early completion of the East Span Project was believed to be possible and sufficient to mitigate potential identified support cost increases. The support cost increases are primarily due to the need to re-advertise the SAS contract and to decisions made to increase our opportunities for early completion of the East Span Project . These decisions include a 12-month schedule extension provided during bid time to attract the maximum number of bidders for the SAS contract and extension of the YBI Detour contract to advance future foundation and column work of the transition structure and west-end deck reconstruction. Since we now judge early completion and the intended cost savings to be unlikely, we forecast a potential drawdown of $293 million from the program contingency for project support. The TBPOC will continue to seek opportunities to economize in this area.

TBSRP Programmatic Risks

This category includes risks that are not yet scoped within existing contracts and/or that spread across multiple contracts. The interdependencies between all of the contracts in the program result in the potential for one contract's delay to impact the other contracts.

Seismic Retrofit of the Dumbarton and Antioch Bridges

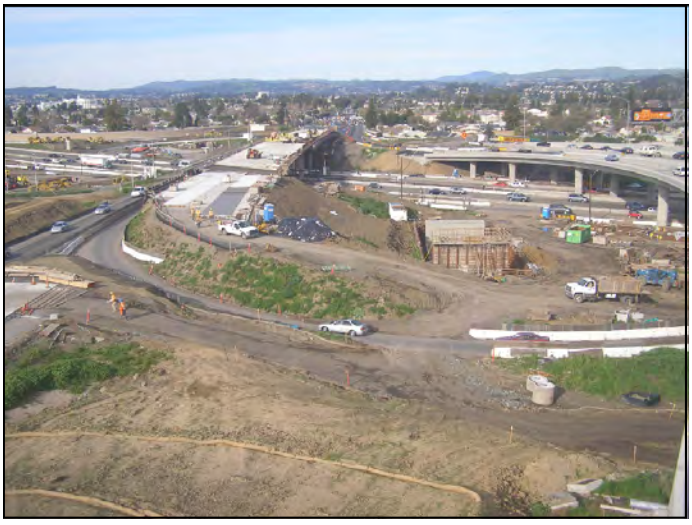
When first conceived, the Toll Bridge Seismic Retrofit Program only identified seven of the nine state-owned toll bridges to be in need of seismic retrofit, which excluded the Dumbarton and Antioch Bridges. Further seismic vulnerability studies completed by Caltrans and BATA on those structures determined that both structures were in need of retrofit based on current seismic standards.
On October11, 2009, Governor Schwarzenegger signed Assembly Bill 1175, which added the Dumbarton and Antioch Bridges to the Toll Bridge Seismic Retrofit Program. BATA has now initiated efforts to raise tolls on the seven

Antioch Bridge

State-owned toll bridges in the Bay Area in part to fund the seismic retrofit of the Dumbarton and Antioch Bridges.

BATA has already funded design plans for both bridge projects in anticipation of securing the capital funding for the project. The total estimated cost of these retrofits has been recently revised from $950 million to $750 million as project plans have been refined with reduced scope, minimizing cost risks.

The Antioch Bridge Seismic Retrofit Contract was advertised in December 2009 with a bid opening scheduled for March 10, 2010. The Dumbarton Bridge Seismic Retrofit Contract is still in design and will be advertised in March 2010.



Site Preparation for New Route 92 and Interstate 880 Separator

Regional Measure 1 Toll Bridge Program (RM1)

Interstate 880/State Route 92 Interchange Reconstruction Project

On this interchange reconstruction contract, the new eastbound State Route 92 to Northbound Interstate 880 direct connector structure (ENCONN) was completed and opened to detour traffic on May 16, 2009. The project is forecast to be completed as planned in June 2011. Caltrans has requested a supplemental allocation of $6 million to replenish the construction contingency.

Toll Bridge Seismic Retrofit Program Cost Summary

	Contract Status	AB 144/SB 66 Budget (July 2005)	TBPOC Approved Changes	Current TBPOC Approved Budget (January 2010)	Cost to Date (January 2010)	Current Cost Forecast (January 2010)	Cost Variance	Cost Status
		a	b	c=a+b	d	e	f=e-c	
SFOBB East Span Seismic Replacement								
Capital Outlay Construction								
Skyway	Completed	1,293.0	(38.9)	1,254.1	1,236.9	1,254.1	-	●
SAS Marine Foundations	Completed	313.5	(32.6)	280.9	275.0	280.9	-	●
SAS Superstructure	Construction	1,753.7	-	1,753.7	904.9	1,947.5	193.8	●
YBI Detour	Construction	132.0	360.9	492.9	419.9	487.3	(5.6)	●
YBI Transition Structures (YBITS)		299.3	(93.0)	206.3	-	210.9	4.6	●
YBITS 1	Awarded			*144.0*	-	*159.9*	*15.9*	●
YBITS 2	Design			*59.0*	-	*47.7*	*(11.3)*	●
YBITS Landscaping	Design			*3.3*	-	*3.3*	-	●
Oakland Touchdown (OTD)		283.8	4.2	288.0	203.4	281.4	(6.6)	●
OTD 1	Construction			*212.0*	*195.6*	*210.4*	*(1.6)*	●
OTD 2	Design			*62.0*	-	*57.0*	*(5.0)*	●
OTD Electrical Systems	Design			*4.4*	-	*4.4*	-	●
Submerged Electric Cable	Completed			*9.6*	*7.8*	*9.6*	-	●
Existing Bridge Demolition	Design	239.2	(0.1)	239.1	-	232.1	(7.0)	●
Stormwater Treatment Measures	Completed	15.0	3.3	18.3	16.7	18.3	-	●
Other Completed Contracts	Completed	90.3	-	90.3	89.2	90.3	-	●
Capital Outlay Support		959.3	-	959.3	811.0	1,252.5	293.2	●
Right-of-Way and Environmental Mitigation		72.4	-	72.4	51.2	72.4	-	●
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	●
Total SFOBB East Span Replacement		5486.6	200.5	5,687.1	4,008.9	6,135.4	448.3	
SFOBB West Approach Replacement								●
Capital Outlay Construction	Completed	309.0	41.7	350.7	328.0	338.1	(12.6)	●
Capital Outlay Support		120.0	(3.0)	117.0	117.0	117.0	-	●
Total SFOBB West Approach Replacement		429.0	38.7	467.7	445.0	455.1	(12.6)	
Completed Program Projects	Completed	1,839.4	(97.5)	1,741.9	1,712.6	1,741.9	-	●
Miscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	●
Net Programmatic Risks		-	-	-	-	265.3	265.3	●
Program Contingency		900.0	(141.7)	758.3	-	57.3	(701.0)	●
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	6,191.2	8,685.0	-	●

● Within approved schedule and budget
● Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated
● Known project impacts with forthcoming changes to approved schedules and budgets

Toll Bridge Seismic Retrofit Program Schedule Summary

	AB144/SB 66 Project Completion Schedule Baseline (July 2005)	TBPOC Approved Changes (Months)	Current TBPOC Approved Completion Schedule (January 2010)	Current Completion Forecast (January 2010)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i = g + h	j	k = j - i	l	
SFOBB East Span Seismic Replacement							
Contract Completion							
Skyway	Apr 2007	8	Dec 2007	Dec 2007	-	●	See Page 34
SAS Marine Foundations	Jun 2008	(5)	Jan 2008	Jan 2008	-	●	See Page 22
SAS Superstructure	Mar 2012	12	Mar 2013	Mar 2013	-	●	See Page 23
YBI Detour	Jul 2007	41	Dec 2010	Dec 2010	-	●	See Page 16
YBI Transition Structures (YBITS)	Nov 2013	12	Nov 2014	Nov 2014	-		See Page 20
YBITS 1			Sep 2013	Sep 2013	-	●	
YBITS 2			Nov 2014	Nov 2014	-	●	
YBITS Landscaping			TBD	TBD	-	●	
Oakland Touchdown	Nov 2013	12	Nov 2014	Nov 2014	-		See Page 35
OTD 1			May 2010	May 2010	-	●	
OTD 2			Nov 2014	Nov 2014	-	●	
OTD Electrical Systems			TBD	TBD	-	●	
Submerged Electric Cable			Jan 2008	Jan 2008	-	●	
Existing Bridge Demolition	Sep 2014	12	Sep 2015	Sep 2015	-	●	
Stormwater Treatment Measures	Mar 2008	-	Mar 2008	Mar 2008	-	●	
SFOBB East Span Bridge Opening and Other Milestones							
OTD Westbound Access			Aug 2009	Aug 2009	-	●	
YBI Detour Open			Sep 2009	Sep 2009	-	●	See Page 18
Westbound Open	Sep 2011	12	Sep 2012	Dec 2012	3	●	
Eastbound Open	Sep 2012	12	Sep 2013	Sep 2013	-	●	
SFOBB West Approach Replacement						●	
Contract Completion	Aug 2009	(7)	Jan 2009	Jan 2009	-	●	

Notes: 1) Figures may not sum up to totals due to rounding effects.
2) TBSRP Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with quarterly risk analysis assessments for the TBSRP Projects.

Regional Measure 1 Program Cost Summary

	Contract Status	BATA Baseline Budget (July 2005)	BATA Approved Changes	Current BATA Approved Budget (January 2010)	Cost to Date (December 2009)	Current Cost Forecast (January 2010)	Cost Variance	Cost Status
		a	b	c = a + b	d	e	f = e - c	
New Benicia-Martinez Bridge								
Capital Outlay Construction	Completed	861.6	174.0	1,035.6	997.9	1,035.7	0.1	●
Capital Outlay Support		157.1	35.1	192.2	191.5	192.2	-	●
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-	●
Project Reserve		20.8	3.6	24.4	-	24.3	(0.1)	
Total New Benicia-Martinez Bridge		1,059.9	212.6	1,272.5	1,206.4	1,272.5	-	
Interstate 880/Route 92 Interchange Reconstruction								
Capital Outlay Construction	Construction	94.8	60.2	161.0	88.5	161.0	-	●
Capital Outlay Support		28.8	34.6	63.4	51.6	63.4	-	●
Capital Outlay Right-of-Way		9.9	7.0	16.9	12.1	16.9	-	●
Project Reserve		0.3	9.4	3.7	-	3.7	-	
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	152.2	245.0	-	
Other Completed Program Projects		918.9	(30.0)	888.9	878.6	888.9	-	
Total Regional Measure 1 Toll Bridge Program		2,112.6	293.8	2,406.4	2,237.2	2,406.4	-	

● Within approved schedule and budget
● Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated
● Known project impacts with forthcoming changes to approved schedules and budgets

Regional Measure 1 Program Schedule Summary

	BATA Baseline Completion Schedule (July 2005)	BATA Approved Changes (Months)	Current BATA Approved Completion Schedule (January 2010)	Current Completion Forecast (January 2010)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i = g + h	j	k = j - i	l	
New Benicia-Martinez Bridge							
Contract Completion							
1962 BM Bridge Reconstruction	Dec 2009	(4)	Aug 2009	Aug 2009	-	●	See Page 53
New Benicia-Martinez Bridge Opening Date							
New Bridge	Dec 2007	(4)	Aug 2007	Aug 2007	-	●	
Interstate 880/Route 92 Interchange Reconstruction							
Contract Completion							
Interchange Reconstruction	Dec 2010	6	Jun 2011	Jun 2011	-	●	See Page 50

Notes: 1) Figures may not sum to totals due to rounding effects.

Shear-leg Barge Crane after Placing Lift 1E of Box Girder on Eastbound Structure

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge Seismic Retrofit Strategy

When a 250-ton section of the upper deck of the East Span collapsed during the 7.1-magnitude Loma Prieta Earthquake in 1989, it was a wake-up call for the entire Bay Area. While the East Span quickly reopened within a month, critical questions lingered: How could the Bay Bridge—a vital regional lifeline structure—be strengthened to withstand the next major earthquake? Seismic experts from around the world determined that to make each separate element seismically safe on a bridge of this size, the work must be divided into numerous projects. Each project presents unique challenges. Yet there is one common challenge — the need to accommodate the more than 280,000 vehicles that cross the bridge each day.

Overview of the Completed West Approach Replacement Structure

West Approach Seismic Replacement Project
Project Status: Completed 2009

Seismic safety retrofit work on the West Approach in San Francisco—bounded on the west by 5th Street and on the east by the anchorage of the west span at Beale Street—involved completely removing and replacing this one-mile stretch of Interstate 80, as well as six on- and off-ramps within the confines of the West Approach's original footprint. This project was completed on April 8, 2009.

West Span Seismic Retrofit Project
Project Status: Completed 2004

The West Span lies between Yerba Buena Island and San Francisco and is made up of two complete suspension spans connected at a center anchorage. Retrofit work included adding massive amounts of steel and concrete to strengthen the entire West Span, along with new seismic shock absorbers and bracing.

West Span of the Bay Bridge

East Span Seismic Replacement Project

Rather than a seismic retrofit, the two-mile-long East Span is being completely rebuilt. When completed, the new East Span will consist of several different sections, but will appear as a single streamlined span. The eastbound and westbound lanes of the East Span will no longer include upper and lower decks. The lanes will instead be parallel, providing motorists with expansive views of the bay. These views will also be enjoyed by bicyclists and pedestrians, thanks to a new path on the south side of the bridge that will extend all the way to Yerba Buena Island. The new span will be aligned north of the existing bridge to allow traffic to continue to flow on the existing bridge as crews build the new span.

The new span will feature the world's longest Self-Anchored Suspension (SAS) bridge that will be connected to an elegant roadway supported by piers (Skyway), which will gradually slope down toward the Oakland shoreline (Oakland Touchdown). A new transition structure on Yerba Buena Island (YBI) will connect the SAS to the YBI Tunnel and will transition the East Span's side-by-side traffic to the upper and lower decks of the tunnel and West Span.

When construction of the new East Span is complete and vehicles have been safely rerouted to it, the original East Span will be demolished.

Architectural Rendering of Skyway and the New Self-Anchored Suspension Bridge Looking Towards Yerba Buena Island

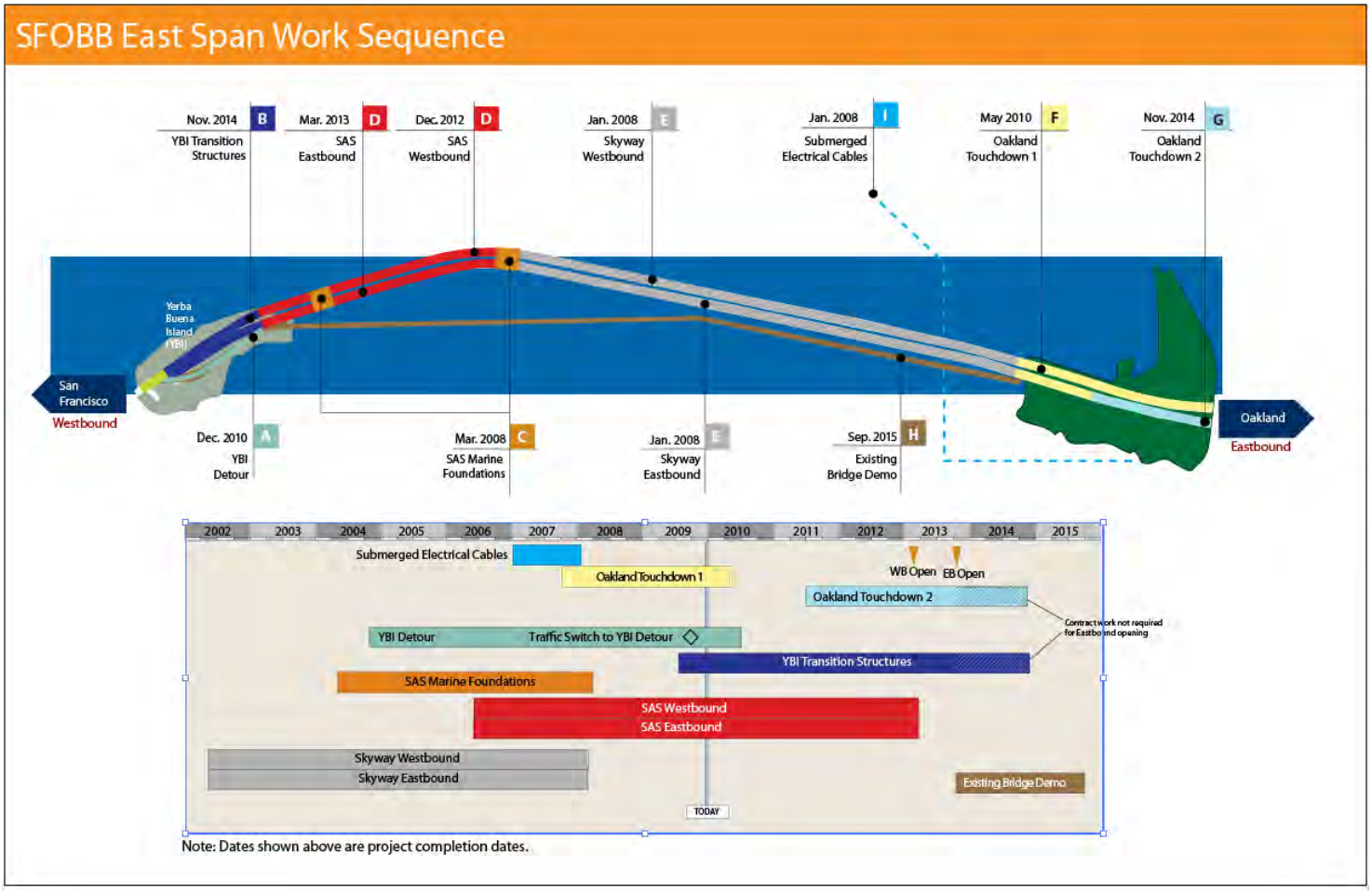
Overview of Demolition of the Existing Viaduct

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Summary

The new East Span bridge can be split into four major components—the Skyway and the Self-Anchored Suspension bridge in the middle and the Yerba Buena Island Transition Structures and Oakland Touchdown approaches at either end. Each component is being constructed by one to three separate contracts that all have been sequenced together.

Highlighted below are the major East Span contracts and their schedules. The letter designation before each contract corresponds to contract descriptions in the report.



Note: Dates shown above are project completion dates.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project
Yerba Buena Island Detour (YBID)

As with all of the Bay Bridge's seismic retrofit projects, crews must build the Yerba Buena Island Transition Structures (YBITS) without disrupting traffic. To accomplish this daunting task, YBID eastbound and westbound traffic was shifted off the existing roadway and onto a temporary detour on Labor Day weekend 2009. Drivers will use this detour, just south of the original roadway, until traffic is moved onto the new East Span.

A YBID Contract

Contractor: C.C. Myers Inc.
Approved Capital Outlay Budget: $492.9 M
Status: 85% Complete as of January 2010

This contract was originally awarded in early 2004 to construct the detour structure for the planned 2006 opening of the new East Span. Due to the re-advertisement of the SAS superstructure contract in 2005 because of a lack of funding at the time, the bridge opening was rescheduled to 2013. To better integrate the contract into the current East Span schedule and to improve seismic safety and mitigate future construction risks, the TBPOC has approved a number of changes to the contract, including adding the deck replacement work near the tunnel that was rolled into place over Labor Day weekend 2007, advancing future transition structure foundation work and making design enhancements to the temporary detour structure.

These changes have increased the budget and forecast for the contract to cover the revised project scope and potential project risks.

Successful Labor Day Weekend 2007 Roll-In Structure to the Tunnel

Tunnel Approach Roadway Replacement

The first in a series of activities to open the detour viaduct was completed in 2007 with the replacement of a 350-foot-long stretch of upper-deck roadway just east of the Yerba Buena Island Tunnel. During this historic milestone, the entire Bay Bridge was closed over the 2007 Labor Day weekend so crews could demolish and replace the old section of the deck with a seismically upgraded 6,500-ton precast section of viaduct that was literally pushed into place (see photo above).

Status: Completed.

Detour Viaduct Fabrication and Construction

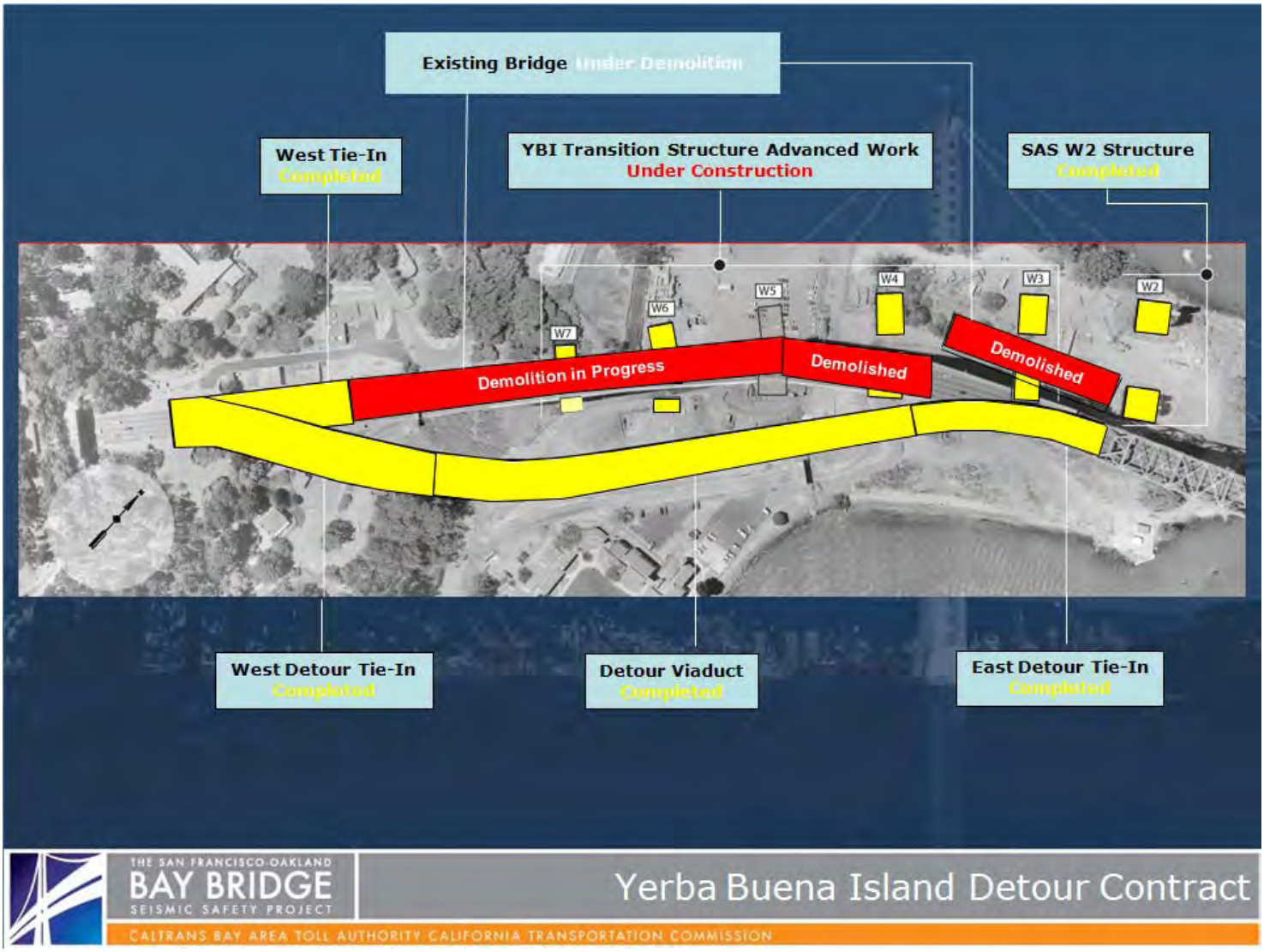
The detour viaduct runs parallel to the existing lanes on the island and ties back into the existing bridge and tunnel. Speed limits have been reduced due to the turns needed to get on and off the detour. The viaduct looks quite similar to the existing bridge, with steel cross beams and girders and a concrete roadway deck. To ensure a good fit, the steel viaduct truss members were pre-fitted during fabrication in South Korea and Oregon.

Status: Completed.

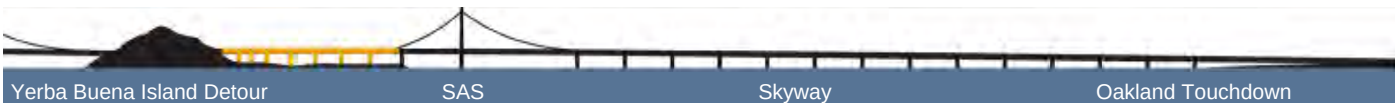
Demolition of Existing Viaduct

After shifting traffic onto the detour structure, crews will focus on the demolition of the existing bridge structure into the tunnel. The old transition structure will need to be removed before construction of the new transition structures from the SAS bridge to the YBI Tunnel can be completed.

Status: Started in early September 2009 and is forecast to be completed in May 2010.



Overview of Yerba Buena Island Detour Contract Scope of Work and Current Status



TOLL BRIDGE SEISMIC RETROFIT PROGRAM
Yerba Buena Island Detour (YBID)

Shifting traffic to the Yerba Buena Island Detour was the most significant realignment of the bridge to date. To accomplish this, crews cut away a 288-foot portion of the existing truss bridge and replaced it with a connection to the detour. This dramatic maneuver involved aerial construction that occurred more than 100 feet above the ground. Vehicles will travel on the detour until the completion of the new East Span.

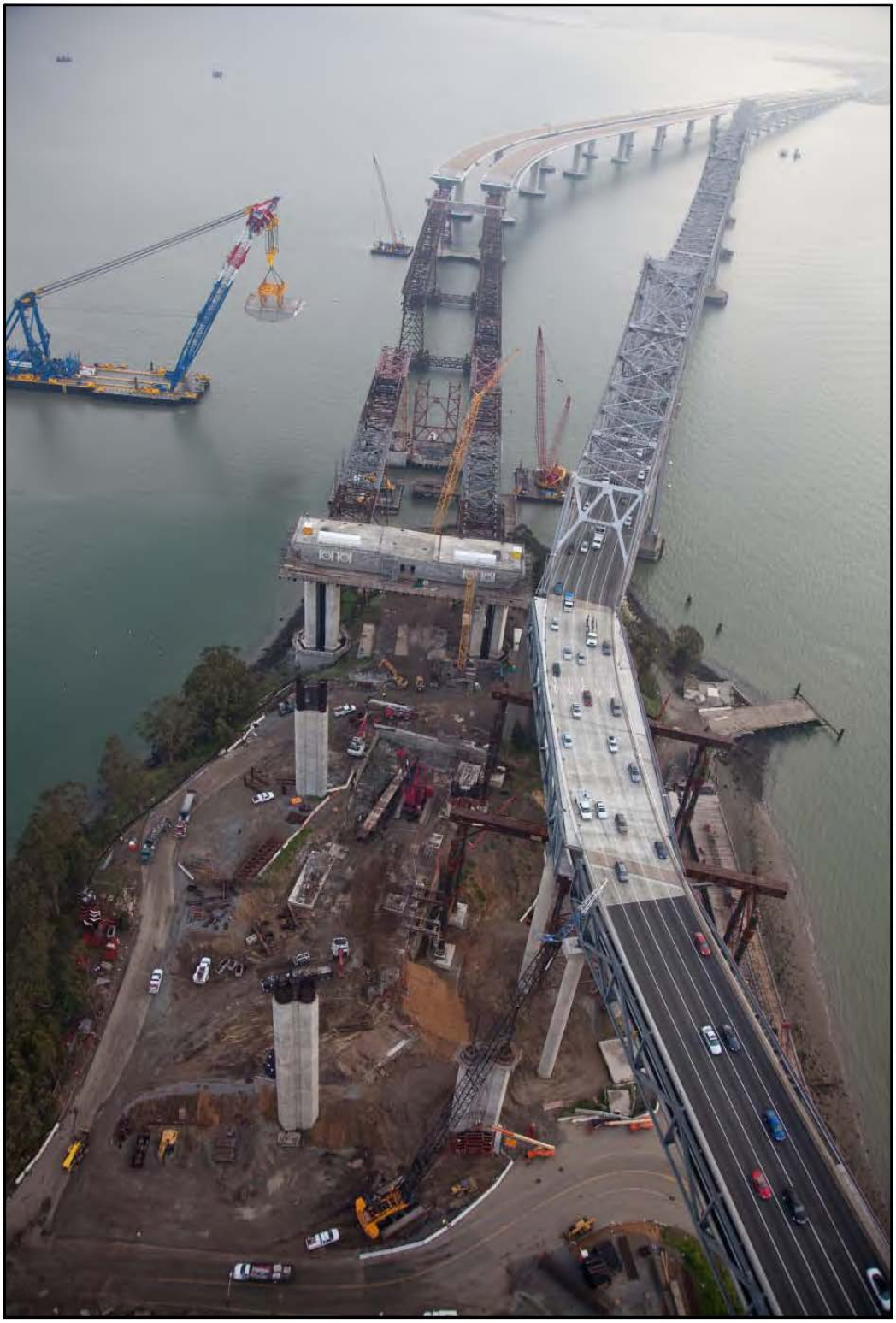
This “S” curve detour now allows for the Yerba Buena Island demolition of the existing structure to proceed. This is a critical step in the overall East Span bridge construction.

Status: Work is ongoing on the demolition of the old viaduct to make way for the Yerba Buena Island Transition Structures #1 contract.

Demolition of Existing Viaduct in Progress

Completed Yerba Buena Island Detour and East Tie-In Roll-Out/Roll-In Structure

San Francisco-Oakland Bay Bridge East Span Replacement Demolition Progress



Aerial View of San Francisco Oakland Bay Bridge Looking East toward Oakland

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project
Yerba Buena Island Transition

The new Yerba Buena Island Transition Structures (YBITS) will connect the new SAS bridge span to the existing Yerba Buena Island Tunnel, transitioning the new side-by-side roadway decks to the upper and lower decks of the tunnel. The new structures will be cast-in-place reinforced concrete structures that will look very similar to the already constructed Skyway structures. While some YBITS foundations and columns have been advanced by the YBID contract, the remaining work will be completed under three separate YBITS contracts.

Yerba Buena Island Transition Structure Columns Looking East toward Oakland

B YBITS #1 Contract

Contractor: TBD
Current Capital Outlay Forecast: $159.9 M
Status: Awarded to MCM Construction, Inc.

The YBITS #1 contract will construct the mainline roadway structures from the SAS bridge to the YBI tunnel. On December 15, 2009, Caltrans opened three bids for the Yerba Buena Island Transitions Structures (YBITS) #1 contract. On February 4, 2010, Caltrans awarded the Yerba Buena Island Transition Structures #1 (YBITS#1)Contract to MCM Construction, Inc. Construction work will start when the YBID contractor has completed demolition of the old viaduct structure. MCM Construction, Inc. is also the firm constructing the Oakland Touchdown #1 contract.

Rendering of Overview of Future Yerba Buena Island Transition Structures (top), in progress with Detour Viaduct (bottom) Completed

YBITS #2 Contract

Contractor: TBD
Current Capital Outlay Forecast: $47.7 M
Status: In Design

The YBITS #2 contract will demolish the detour viaduct after all traffic is shifted to the new bridge and will construct a new eastbound on-ramp to the bridge in its place. The new ramp will also provide the final link for bicycle/pedestrian access off the SAS bridge onto Yerba Buena Island.

YBITS Landscaping Contract

Contractor: TBD
Current Capital Outlay Forecast: $3.3 M
Status: In Design

Upon completion of the YBITS work, a follow-on landscaping contract will be executed to re-plant and landscape the area.

Yerba Buena Island Transition Structures Advanced Work

Due to the re-advertisement of the SAS superstructure contract in 2005, it became necessary to temporarily suspend the detour contract and make design changes to the viaduct. To make more effective use of the extended contract duration and to reduce overall project schedule and construction risks, the TBPOC approved the advancement of foundation and column work from the Yerba Buena Island Transition Structures contract.

Yerba Buena Island Transition Structures Looking West

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Self-Anchored Suspension (SAS) Bridge

If one single element bestows world class status on the new Bay Bridge East Span, it is the Self-Anchored Suspension (SAS) bridge. This engineering marvel will be the world's largest SAS span at 2,047 feet in length, as well as the first bridge of its kind built with a single tower.

The SAS was separated into three separate contracts—construction of the land-based foundations and columns at Pier W2; construction of the marine-based foundations and columns at Piers T1 and E2; and construction of the SAS steel superstructure, including the tower, roadway, and cabling. Construction of the foundations at Pier W2 and at Piers T1 and E2 was completed in 2004 and 2007, respectively.

SAS Land Foundation Contract

Contractor: West Bay Builders, Inc.
Approved Capital Outlay Budget: $26.4 M
Status: Completed October 2004

The twin W2 columns on Yerba Buena Island provide essential support for the western end of the SAS bridge, where the single main cable for the suspension span will extend down from the tower and wrap around and under the western end of the roadway deck. Each of these huge columns required massive amounts of concrete and steel and are anchored 80 feet into the island's solid bedrock.

SAS T1 Trestle Overview

SAS Overview of W2 Cap Beam

C SAS Marine Foundations Contract

Contractor: Kiewit/FCI/Manson, Joint Venture
Approved Capital Outlay Budget: $280.9 M
Status: Completed January 2008

Construction of the piers at E2 and T1 required significant on-water resources to drive the foundation support piles down, not only to bedrock, but also through the bay water and mud (see rendering on facing page).

The T1 foundation piles extend 196 feet below the waterline and are anchored into bedrock with heavily reinforced concrete rock sockets that are drilled into the rock. Driven nearly 340 feet deep, the steel and concrete E2 foundation piles were driven 100 feet deeper than the deepest timber piles of the existing east span in order to get through the bay mud and reach solid bedrock.

D SAS Superstructure Contract

Contractor: American Bridge/Fluor Enterprises, Joint Venture
Approved Capital Outlay Budget: $1.75 B
Status: 48% Complete as of January 2010

The SAS bridge is not just another suspension bridge. Rising 525 feet above mean sea level and embedded in rock, the single-tower SAS span is designed to withstand a massive earthquake. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. These cables hold up the roadbed and are anchored to the east end of the box girders. While there will appear to be two main cables on the SAS, there will actually only be one. This single cable will be anchored within the eastern end of the roadway, carried over the tower and then wrapped around the two side-by-side decks at the western end.

The single steel tower will be made up of four separate legs connected by shear link beams which function much like a fuse in an electrical circuit. These beams will absorb most of the impact from an earthquake, preventing damage to the tower legs.

The next several pages highlight the construction sequence of the SAS and are followed by detailed updates on specific construction activities.

Architectural Rendering of New Self-Anchored Suspension Span and Skyway

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Construction Sequence

Step 1 - Construct Temporary Support Structures

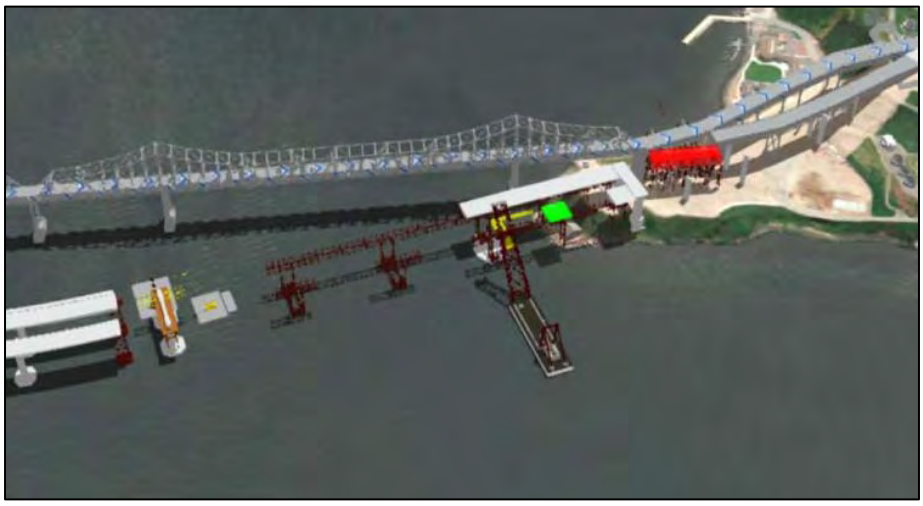
Temporary support structures will need to be erected from the Skyway to Yerba Buena Island to support the new SAS bridge during construction.

Status: Foundations for the temporary supports are complete. Support structures are now being installed from west to east.

Step 2 - Install Roadways

The roadway boxes are being lifted into place by using the shear-leg crane barge. The boxes are being bolted and welded together atop the temporary support trusses to form two continuous parallel steel roadway boxes.

Status: The first four eastbound roadway boxes have been lifted into place (see status on page 28).



Step 3 - Install Tower

Each of the four legs of the tower will be erected in five separate lifts. The first lift will use the shear-leg crane barge while the remaining higher lifts will use a temporary support tower and lifting jacks.

Status: The first shipment of tower sections is being fabricated and is forecast for shipment in mid - 2010 (see page 26 for more information).

Step 4 - Main Cable and Suspender Installation

The main cable will be pulled from the east end of the SAS bridge, over the tower, and wrapped around the west end before returning back. Suspender cables will be added to lift the roadway decks off the temporary support structure.

Status: Cable installation is pending the erection of the tower and roadway spans. Shipment for the first half of the cables arrived in January 2010.

Step 5 - Westbound Opening

The new bridge will first open in the westbound direction pending completion of the Yerba Buena Island Transition Structures. Westbound access to the Skyway from Oakland will be completed by the Oakland Touchdown #1 contract in 2009.

Status: Westbound opening is forecast for the end of 2012.

Step 6 - Eastbound Opening

Opening of the bridge in the eastbound direction is pending completion of Oakland Touchdown #2. Westbound traffic will need to be routed off the existing bridge before the eastbound approach structure can be completed.

Status: Eastbound opening is forecast for third quarter 2013.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Fabrication Activities

Nearly every component of the SAS above the waterline—from the temporary support structures to the roadway and tower box sections to the main cable and suspender ropes—will be fabricated off-site and erected into place upon arrival in the Bay Area. This project is truly global in nature, with fabrication of the bridge components occurring not only in the United States but around the world—in China, the United Kingdom, Japan, South Korea and other locations.

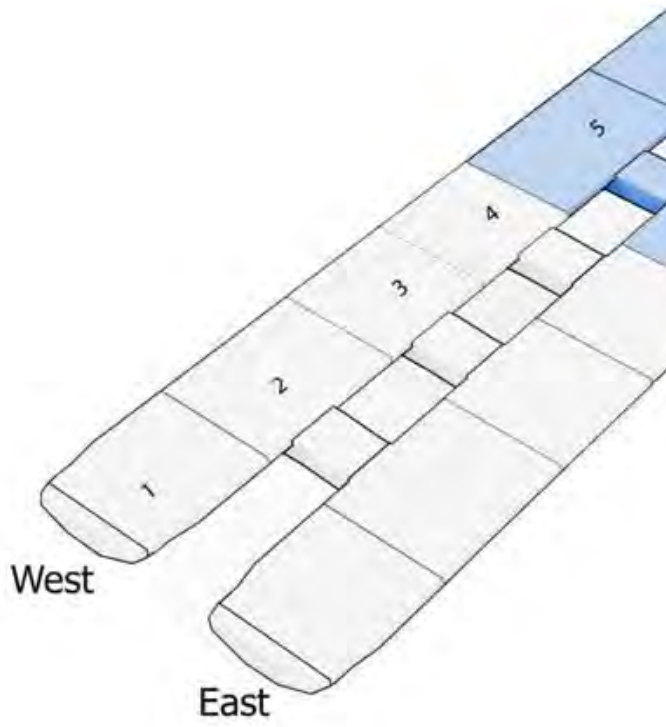
Lifts 6 & 7 Box Girder Assembly in Trial Assembly Yard

Roadway and Tower Segments

Like giant three-dimensional jigsaw puzzles, the roadway and tower segments of the SAS bridge are hollow steel shells that are internally strengthened and stiffened by a highly engineered network of welded steel ribs and diaphragms. The use of steel in this manner allows for a flexible yet relatively light and strong structure able to withstand the massive loads placed on the bridge during seismic events.

Status: The contractor has reported that fabrication of the steel tower and roadway boxes has fallen 15 months behind schedule due to the complexity of the design and fabrication.

As shown in the diagram to the right, roadway segments 5 to 8 are further along in the process, while segment 9 through 12 are in segment assembly. Tower segments 1 to 4 are in various stages of fabrication. The first shipment of roadway boxes (segments 1 through 4) were shipped on December 30, 2009 and were lifted into place on the temporary support structures, while roadway segments 5 to 8 are in paint and fit-up. The first tower segments are expected to arrive this year.



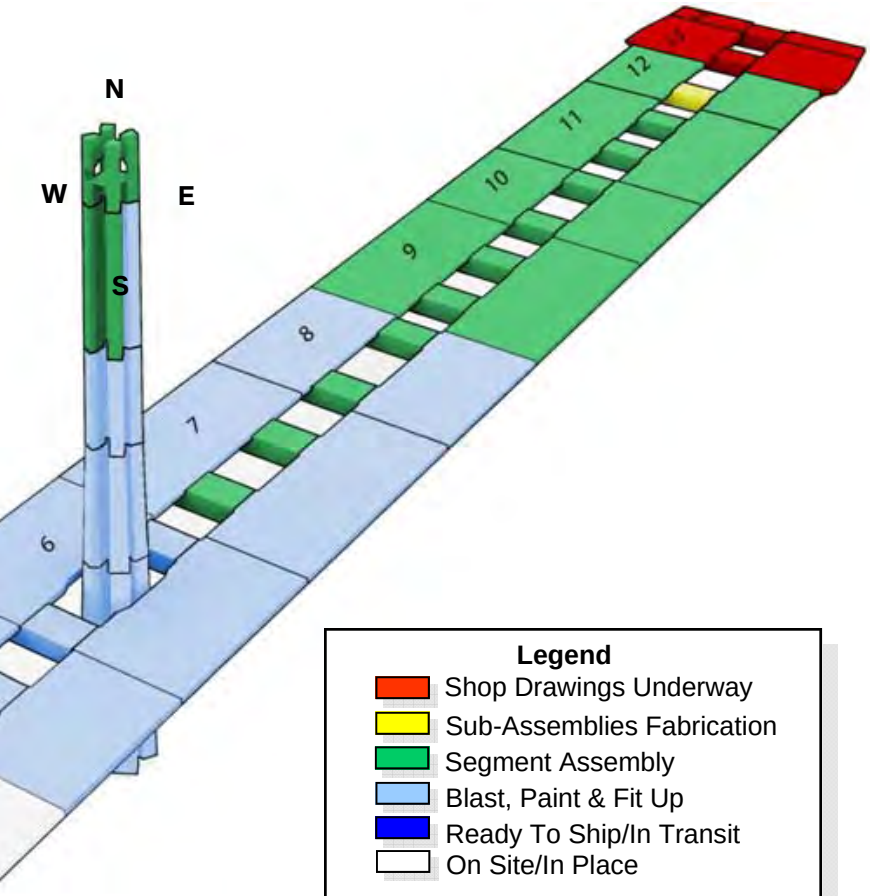
All components have undergone a rigorous quality review by ZPMC, ABF, and Caltrans to ensure that only bridge components that have been built in accordance to the specifications will be shipped.

On the critical path to completing the bridge are the fabrication of the last two roadway sections (segments 13 and 14). Start of fabrication of these segments has fallen behind schedule due to delays in the fabrication drawing preparation process. The TBPOC has taken steps to ensure completion of the shop drawings by March 2010. These delays will likely preclude the westbound opening of the bridge in 2012, but we continue to push for full opening of the bridge in 2013 (see additional progress photos on pages 76 through 79).

.

Fabrication Progress Diagram

Through February 2010



Legend

- Shop Drawings Underway
- Sub-Assemblies Fabrication
- Segment Assembly
- Blast, Paint & Fit Up
- Ready To Ship/In Transit
- On Site/In Place

Through February 12, 2010

Lift 5 E Grillage Main Corner Seam Welding Completed

SAS Tower Lift 1 and Lift 2 Placement in Trial Assembly

Overview of Lift 11 Assembly in Bay 13

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Roadway and Tower Box Installation Status

SAS Bridge Structure Components:

Deck Sections:
The bridge decks of the SAS section of the new East Span of the San Francisco Oakland Bay Bridge are composed of 28 lifts (14 in each direction). There are also 19 cross beams between the westbound and eastbound decks

Tower:
The Tower of the Self Anchored Suspension bridge is composed of six different components—four lifts that make up the majority of the height of the tower, the tower grillage and finally, the tower head.

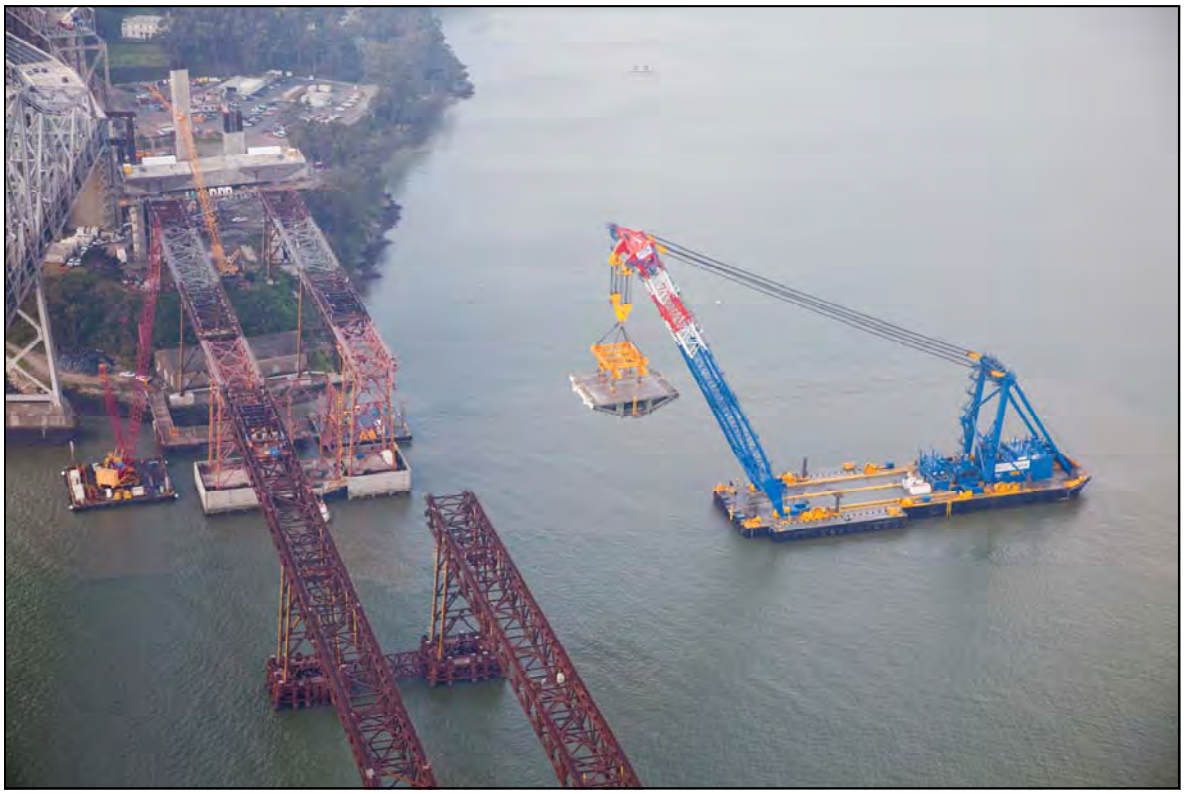
The fabrication status of the SAS section of the new East Span of the bridge shown on below indicates the status of the installation of these fabricated bridge components.

Status: The first shipment of roadway boxes (lifts 1 through 4 eastbound and westbound) were shipped on December 30, 2009 and 1 through 4 eastbound have been lifted into place on the temporary support structures (see diagram below). The first westbound lift will be placed in the first week of March.

SAS Superstructure Roadway and Tower Box Installation Status

Through February 2010

SAS North View of OBG Lift 2E on the Eastbound Temporary Structure



Shear-Leg Barge Crane Lifting Lift 1E

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Fabrication Activities (cont.)

Cables and Suspenders

One continuous main cable will be used to support the roadway deck of the SAS bridge. Anchored into the eastern end of the bridge, the main cable will start on the east end of the box girder, go over the main tower at T1, loop around the western end of the roadway decks at Pier W2, and then go back over the main tower to the eastern end of the box girder. The main cable will be made up of bundles of individual wire strands. Supporting the roadway decks to the main cable will be a number of smaller suspender cables. The main cable will be fabricated in China and the suspender cables in Missouri, USA.

Status: Initial trial testing of the main cable strands was performed in September 2009. The first half of the cable shipment arrived on site in January 2010.

SAS West Saddle Cable Divider Plates

SAS Trial Button Casting on 75 mm Wire Rope

Saddles, Bearings, Hinges, and Other Bridge Components

The mounts on which the main cable and suspender ropes will sit are made from solid steel castings. Castings for the main cable saddles are being made by Japan Steel Works, while the cable bands and brackets are being made by Goodwin Steel in the United Kingdom.

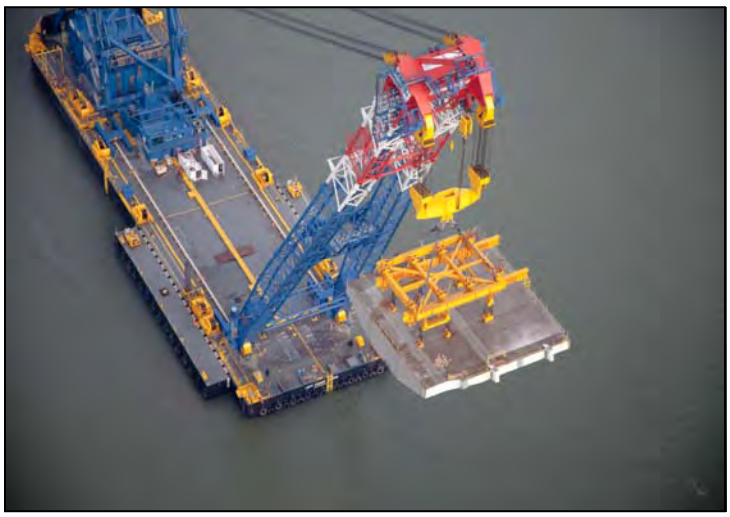
The bridge bearings and hinges that support, connect, and transfer loads from the self-anchored suspension (SAS) span to the adjoining sections of the new east span are being fabricated in a number of locations. Work on the bearings is being performed in Pennsylvania, USA and Hochang, South Korea, while hinge pipe beams are being fabricated in Oregon, USA.

Status: The cable saddles and hinges at the W2 cap beam and YBITS are under fabrication. The hinges in between the Skyway and Oakland Touchdown have been installed.

.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Field Activities



Shear-Leg Barge Crane Carrying OBG Lift 1E

Shear-Leg Barge Crane

The massive shear-leg barge crane that is helping to build the SAS superstructure arrived in the San Francisco Bay on March 12, 2009 after a trans-Pacific voyage.

The crane and barge are separate units operating as a single entity dubbed the “Left Coast Lifter.” The 400-by-100-foot barge is a U.S. f lagged vessel that was custom built in Portland, Oregon by U.S. Barge, LLC and outfitted with the crane by Shanghai Zhenhua Heavy Industry Co. Ltd. (ZPMC) at a facility near Shanghai, China. The crane’s boom weighs 992 tons and is 328 feet long. The crane can lift up to 1,873 tons, including the deck and tower sections for the SAS.

The crane has off-loaded all temporary structures shipped to date and has lifted 85 percent of the temporary structures into place. Work on the eastbound side of the SAS must occur first, as the crane cannot reach over permanent westbound decks to work on the eastbound roadway.

Status: The shear-leg crane arrived at the jobsite March 2009

SAS W2 Cap Beam

Cap Beams

Construction of the massive steel-reinforced concrete cap beams that link the columns at piers W2 and E2 was left to the SAS superstructure contractor and represents the only concrete portions of work on that contract. The east and west ends of the SAS roadway will rest on the cap beams and the main cable will wrap around Pier W2, while anchoring into the east end of the SAS deck sections near E2.

Status: Completed March 2009

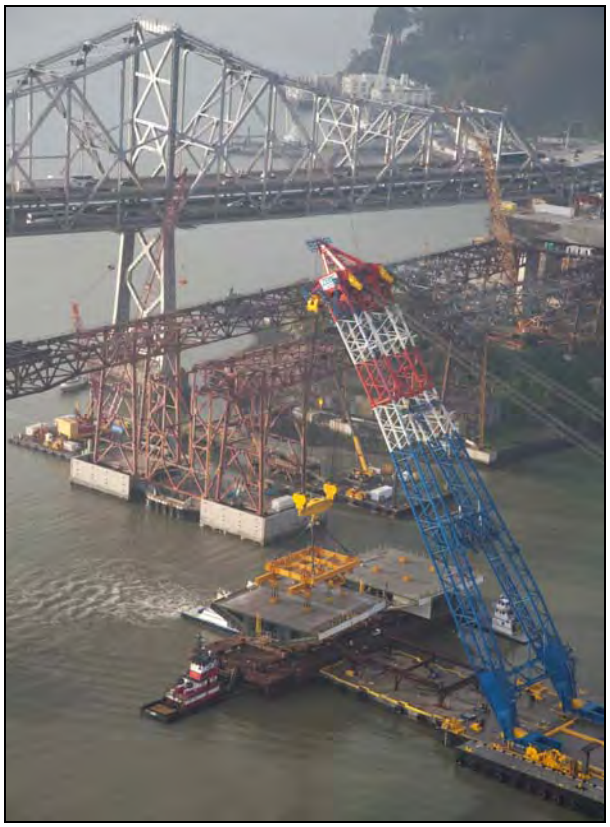
TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Self-Anchored Suspension (SAS) Superstructure Field Activities

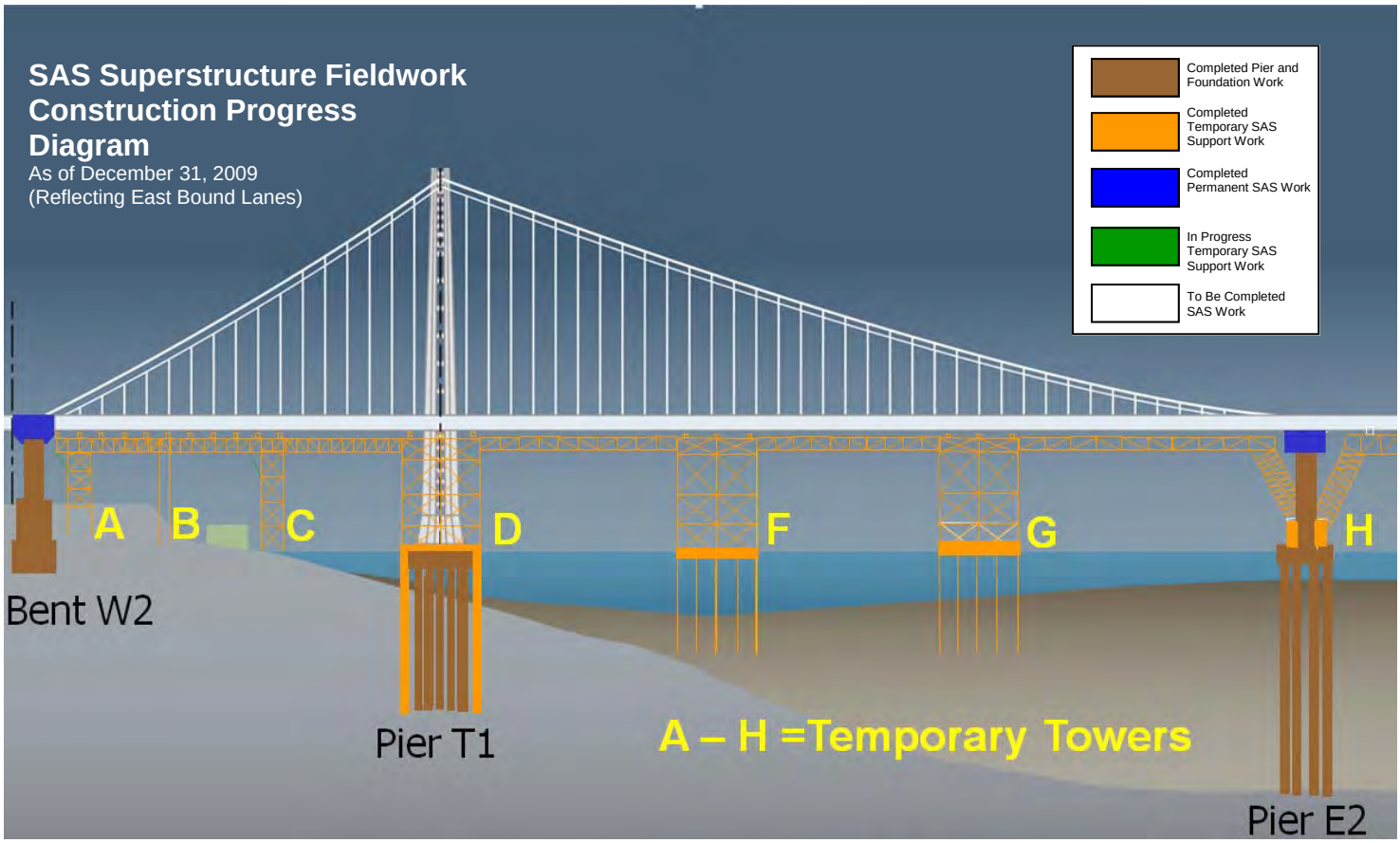
Temporary Support Structures

To erect the roadway decks and tower of the bridge, temporary support structures will first be put in place. Almost a bridge in itself, the temporary support structures will stretch from the end of the completed Skyway back to Yerba Buena Island. For the tower, a strand jack system is being built into the tower's temporary frame to elevate the upper sections of the tower into place. These temporary supports are being fabricated in the Bay Area, as well as in Oregon and in China at ZPMC.

Status: The temporary support foundations are complete and 85% of temporary structures have been erected.



SAS Shear-Leg Barge Crane Lifting OBG Lift 1E



SAS Temporary Support Structures and OBG Lifts 1 & 2 Placed on Eastbound Structure

SAS Temporary Support Structures and Existing East Span

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Skyway

The Skyway, which comprises much of the new East Span, will drastically change the appearance of the Bay Bridge. Replacing the gray steel that currently cages drivers, a graceful, elevated roadway supported by piers will provide sweeping views of the bay.

E Skyway Contract

Contractor: Kiewit/FCI/Manson, Joint Venture
Approved Capital Outlay Budget: $1,254.1 M
Status: Completed March 2008

Extending for more than a mile across Oakland mudflats, the Skyway is the longest section of the East Span. It sits between the new Self-Anchored Suspension (SAS) span and the Oakland Touchdown. In addition to incorporating the latest seismic-safety technology, the side-by-side roadway decks of the Skyway feature shoulders and lane widths built to modern standards.

The Skyway's decks are composed of 452 pre-cast concrete segments (standing three stories high), containing approximately 200 million pounds of structural steel, 120 million pounds of reinforcing steel, 200 thousand linear feet of piling and about 450 thousand cubic yards of concrete. These are the largest segments of their kind ever cast and were lifted into place by custom-made winches.

The Skyway marine foundation consists of 160 hollow steel pipe piles measuring eight feet in diameter and dispersed among 14 sets of piers. The 365-ton piles were driven more than 300 feet into the deep bay mud. The new East Span piles were battered or driven in at an angle, rather than vertically, to obtain maximum strength and resistance.

Designed specifically to move during a major earthquake, the Skyway features several state-of-the-art seismic safety innovations, including 60-foot-long hinge pipe beams. These beams will allow deck segments on the Skyway to move, enabling the deck to withstand greater motion and to absorb more earthquake energy.

Overview of the Skyway and the Temporary Structures with the Shear-Leg Barge Crane Lifting Lift 1E of Orthotropic Box Girders (OBG)

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project
Oakland Touchdown

When completed, the Oakland Touchdown (OTD) structures will connect Interstate 80 in Oakland to the new side-by-side decks of the new East Span. For westbound drivers, the OTD will be their introduction to the graceful new East Span. For eastbound drivers from San Francisco, this section of the bridge will carry them from the Skyway to the East Bay, offering unobstructed views of the Oakland hills.

The OTD will be constructed through two contracts. The first contract will build the new westbound lanes, as well as part of the eastbound lanes. The second contract to complete the eastbound lanes cannot fully begin until westbound traffic is shifted onto the new bridge. This enables a portion of the upper deck of the existing bridge to be demolished allowing for a smooth transition for the new eastbound lanes in Oakland.

F Oakland Touchdown #1 Contract

Contractor: MCM Construction, Inc.
Current Capital Outlay Forecast: $210.4 M
Status: 91% Complete as of January 2010

The OTD #1 contract constructs the entire 1,000-foot-long westbound approach from the toll plaza to the Skyway. When completed, the westbound approach structure will provide direct access to the westbound Skyway. In the eastbound direction, the contract will construct a portion of the eastbound structure and all of the eastbound foundations that are not in conflict with the existing bridge.

Status: On the westbound structure, the contractor has completed all work and is completing the eastbound superstructure work. The contractor, MCM, re-established temporary construction access to the Skyway structure over the new westbound Oakland Touchdown on August 4.

G Oakland Touchdown #2 Contract

Contractor: TBD
Current Capital Outlay Forecast: $57.0 M
Status: In design

The OTD #2 contract will complete the eastbound approach structure from the end of the Skyway to Oakland. This work is critical to the eastbound opening of the new bridge, but cannot be completed until westbound traffic has been shifted off the existing upper deck to the new SAS bridge.

Overview of Oakland Touchdown #1 Project

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

San Francisco-Oakland Bay Bridge East Span Replacement Project Other Contracts

A number of contracts needed to relocate utilities, clear areas of archeological artifacts, and prepare areas for future work have already been completed. The last major contract will be the eventual demolition and removal of the existing bridge, which by that time will have served the Bay Area for nearly 80 years. Following is a status of some the other East Span contracts.

Archeological Investigations

East Span Interim Seismic Retrofit

Contractors: 1) California Engineering Contractors
2) Balfour Beatty
Approved Capital Outlay Budget: $30.8 M
Status: Completed October 2000

After the 1989 Loma Prieta Earthquake, and before the final retrofit strategy was determined for the East Span, Caltrans completed an interim retrofit of the existing bridge to prevent a catastrophic collapse of the bridge should a similar earthquake occur before the East Span was completely replaced. The interim retrofit was performed under two separate contracts that lengthened pier seats, added some structural members, and strengthened areas of the bridge so they would be more resilient during an earthquake.

Existing East Span of Bay Bridge

Stormwater Treatment Measures

Contractor: Diablo Construction, Inc.
Approved Capital Outlay Budget: $18.3 M
Status: Completed December 2008

The Stormwater Treatment Measures contract implemented a number of best practices for the management and treatment of stormwater runoff. Focused on the areas around and approaching the toll plaza, the contract added new drainage and built new bio-retention swales and other related constructs.

Stormwater Retention Basin

Yerba Buena Island Substation

Contractor: West Bay Builders
Approved Capital Outlay Budget: $11.6 M
Status: Completed May 2005

This contract relocated an electrical substation just east of the Yerba Buena Island Tunnel in preparation for the new East Span.

Pile Installation Demonstration

Contractor: Manson and Dutra, Joint Venture
Approved Capital Outlay Budget: $9.2 M
Status: Completed December 2000

While common in offshore drilling, the new East Span is one of the first bridges to use large-diameter battered piles in its foundations. To minimize project risks and build industry knowledge, a pile installation demonstration project was initiated to prove the efficacy of the proposed technology and methodology. The demonstration was highly successful and helped result in zero contract change orders or claims for pile driving on the project.

H Existing Bridge Demolition

Contractor: TBD
Approved Capital Outlay Budget: $239.1 M
Status: In Design

Design work on the contract will start in earnest as the opening of the new bridge to traffic approaches.

New YBI Electrical Substation

I Electrical Cable Relocation

Contractor: Manson Construction
Approved Capital Outlay Budget: $9.6 M
Status: Completed January 2008

A submerged cable from Oakland that is close to where the new bridge will touch down supplies electrical power to Treasure Island. To avoid any possible damage to the cable during construction, two new replacement cables were run from Oakland to Treasure Island. The extra cable was funded by the Treasure Island Development Authority and its future development plans.

TOLL BRIDGE SEISMIC RETROFIT PROGRAM

Other Completed Projects

In the 1990s, the State Legislature identified seven of the nine state-owned toll bridges for seismic retrofit. In addition to the San Francisco-Oakland Bay Bridge, these included the Benicia-Martinez, Carquinez, Richmond-San Rafael and San Mateo-Hayward bridges in the Bay Area, and the Vincent Thomas and Coronado bridges in Southern California. Other than the East Span of the Bay Bridge, the retrofits of all of the bridges have been completed as planned.

High-Rise Section of San Mateo-Hayward Bridge

San Mateo-Hayward Bridge Seismic Retrofit Project
Project Status: Completed 2000

The San Mateo-Hayward Bridge seismic retrofit project focused on strengthening the high-rise portion of the span. The foundations of the bridge were significantly upgraded with additional piles.

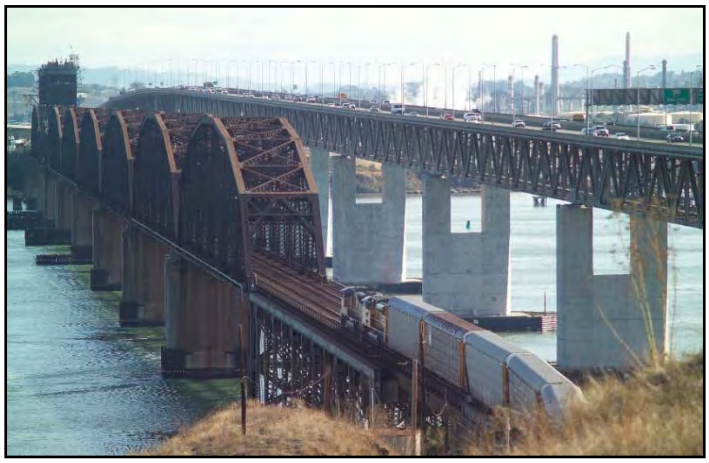
1958 Carquinez Bridge (foreground) with the 1927 Span (middle) under Demolition and the New Alfred Zampa Memorial Bridge (background)

1958 Carquinez Bridge Seismic Retrofit Project
Project Status: Completed 2002

The eastbound 1958 Carquinez Bridge was retrofitted in 2002 with additional reinforcement of the cantilever thru-truss structure.

1962 Benicia-Martinez Bridge Seismic Retrofit Project
Project Status: Completed 2003

The southbound 1962 Benicia-Martinez Bridge was retrofitted to “Lifeline” status with the strengthening of the foundations and columns and the addition of seismic bearings that allow the bridge to move during a major seismic event. The Lifeline status means the bridge is designed to sustain minor to moderate damage after an event and to reopen quickly to emergency response traffic.



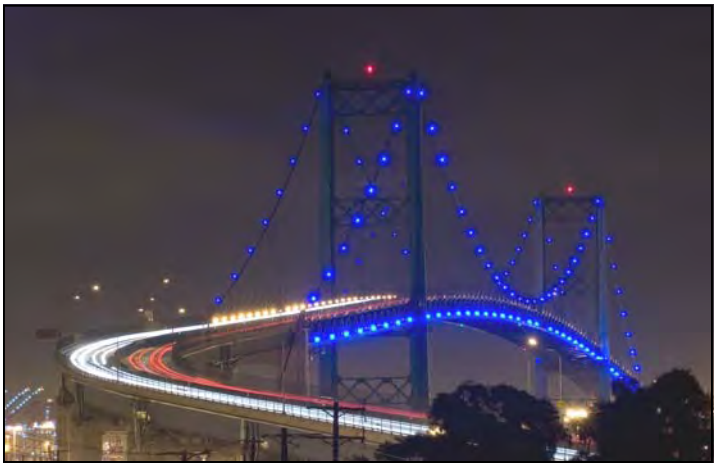
1962 Benicia-Martinez Bridge (right)

Richmond-San Rafael Bridge Seismic Retrofit Project
Project Status: Completed 2005

The Richmond-San Rafael Bridge was retrofitted to a “No Collapse” classification to avoid catastrophic failure during a major seismic event. The foundations, columns, and truss of the bridge were strengthened, and the entire low-rise approach viaduct from Marin County was replaced.

Richmond-San Rafael Bridge

Los Angeles-Vincent Thomas Bridge Seismic Retrofit Project
Project Status: Completed 2000



Los Angeles-Vincent Thomas Bridge

San Diego-Coronado Bridge Seismic Retrofit Project
Project Status: Completed 2002

San Diego-Coronado Bridge

Seismic Retrofit of the Dumbarton and Antioch Bridges

Antioch Bridge

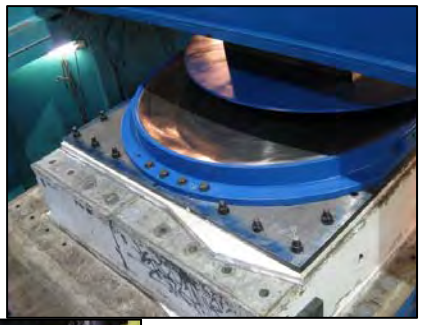
SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

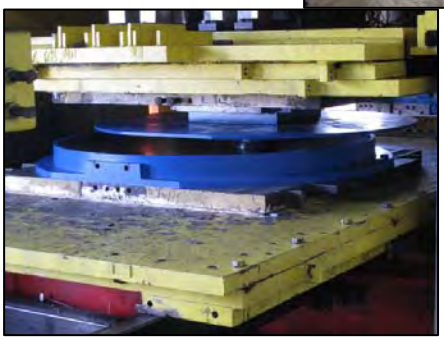
Dumbarton Bridge Seismic Retrofit Project

Project Status: In Design

The Dumbarton Bridge was opened to traffic in 1982, linking the cities of Newark in Alameda County and East Palo Alto in San Mateo County. The 1.6-mile-long bridge carries average daily traffic of nearly 60,000 vehicles over its six lanes and has an eight-foot bicycle/pedestrian lane to the south.

Though located between the San Andreas and Hayward faults, the Dumbarton Bridge was not included in the Toll Bridge Seismic Retrofit Program based on evaluations made in the 1990s that concluded the bridge did not warrant retrofitting. The bridge has since been re-evaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.





Dumbarton Prototype Bearing Test at Earthquake Protection Systems (EPS)

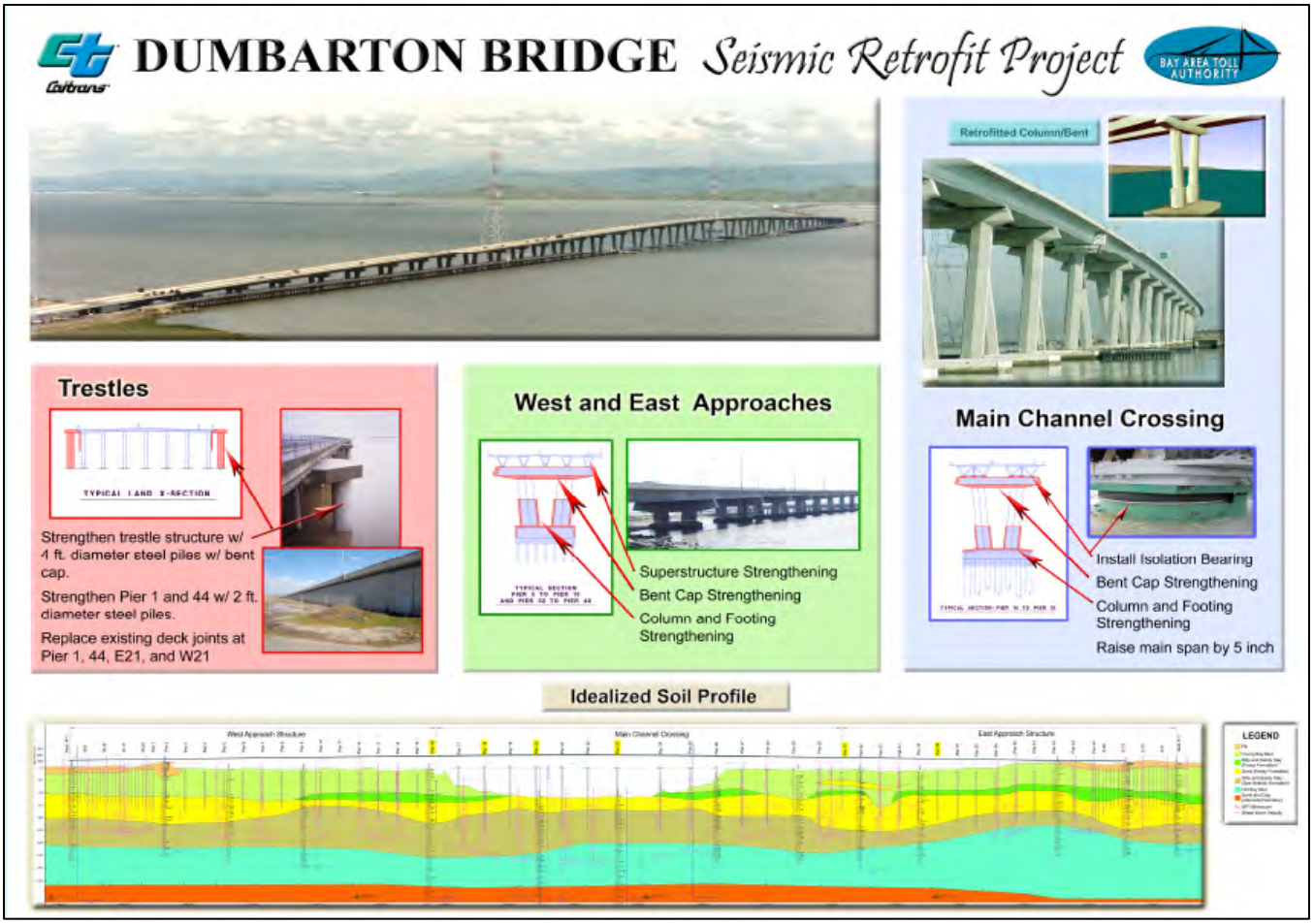
Existing Dumbarton Bridge Looking East toward the Alameda County Foothills

Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps towards retrofitting the Dumbarton Bridge, even though full funding for the project has not yet been identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This includes detailed geotechnical and geophysical investigations at the bridge and development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Dumbarton Bridge includes superstructure and deck modifications, as well as strengthening the over land approach slab structures. Additional activities are identified in the attached diagram. The results of the seismic analysis and proposed retrofit strategy have been presented to the Toll Bridge Seismic Safety Peer Review Panel.

Status: On October 11, 2009, Governor Schwarzenegger approved Assembly Bill 1175 that added the Dumbarton and Antioch Bridges to the Toll Bridge Seismic Retrofit Program. BATA has now initiated efforts to raise tolls on the seven state-owned toll bridges in the Bay Area to, in part, fund the seismic retrofit of the Dumbarton and Antioch bridges.

BATA has already funded design plans for both bridge projects in anticipation of the projects being advertised in early 2010. The total estimated cost of these retrofits has been recently revised from $950 million to $750 million as project plans have been refined with reduced scope, minimizing cost risks. In the future, the project progress report will be updated to better reflect the incorporation of these two projects into the Toll Bridge Seismic Retrofit Program. The Dumbarton Bridge Seismic Retrofit Contract is still in design and will be advertised in March 2010.



Seismic Retrofit Strategy Summary for Dumbarton Bridge

SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

Antioch Bridge Seismic Retrofit Project

Project Status: Advertised

Serving the Delta region of the Bay Area, the Antioch Bridge takes State Route 160 traffic over the San Joaquin River, linking eastern Contra Costa County with Sacramento County. The current bridge was opened in 1978 with one lane in each direction and carries an average of more than 10,000 vehicles a day. Approximately 1.8 miles long, the bridge is a steel girder support roadway on reinforced concrete columns and foundations.

Like the Dumbarton Bridge, the Antioch bridge was not included in the Toll Bridge Seismic Retrofit Program based on evaluations made in the 1990s that concluded that the bridge did not warrant retrofitting. The Antioch Bridge has since been re-evaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.

Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps toward retrofitting the Antioch Bridge, even though full funding for the project has not yet been identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This analysis includes detailed geotechnical and geophysical investigation at the bridge and the development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Antioch Bridge includes relatively minor modifications to the approach structure on Sherman Island, the addition of isolation bearings, strengthening of the columns, and hinge retrofits. The results of the seismic analysis and proposed retrofit strategy have been presented to the Toll Bridge Seismic Safety Peer Review Panel.

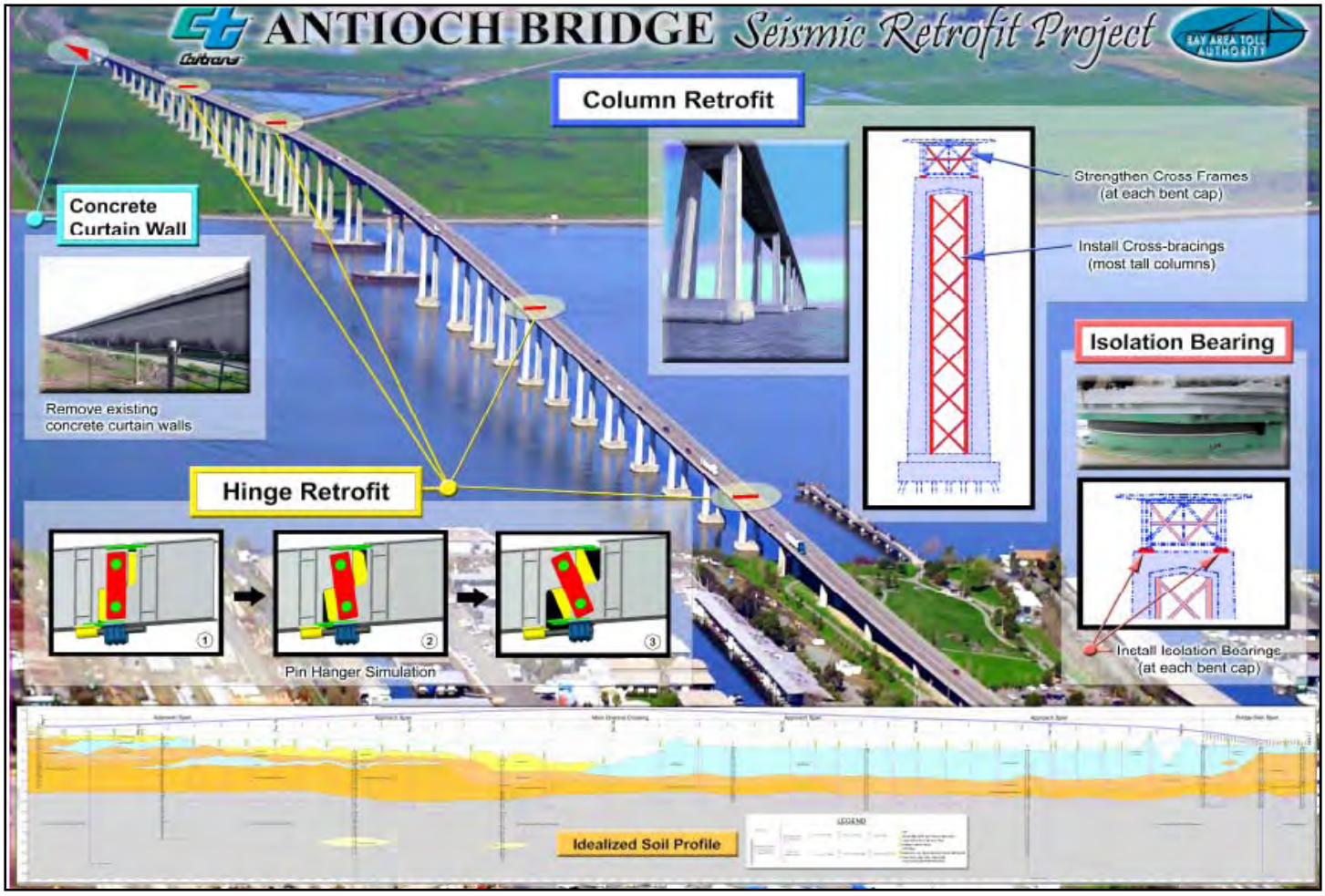
Antioch Bridge

Status: On October 11, 2009, Governor Schwarzenegger approved Assembly Bill 1175 that added the Dumbarton and Antioch Bridges to the Toll Bridge Seismic Retrofit Program. BATA has now initiated efforts to raise tolls on the seven state-owned toll bridges in the Bay Area to, in part, fund the seismic retrofit of the Dumbarton and Antioch bridges.

BATA has already funded design plans for both bridge projects in anticipation of the projects being advertised in early 2010. The total estimated cost of these retrofits has been recently revised from $950 million to $750 million as project plans have been refined with reduced scope, which has minimized cost risks. In the future, the project progress report will be updated to better reflect the incorporation of these two projects into the Toll Bridge Seismic Retrofit Program.

The Antioch Bridge Seismic Retrofit Contract was advertised in December 2009 with a bid opening scheduled for March 10, 2010.

Prototype of Bearing for the Antioch Bridge Seismic Retrofit Project



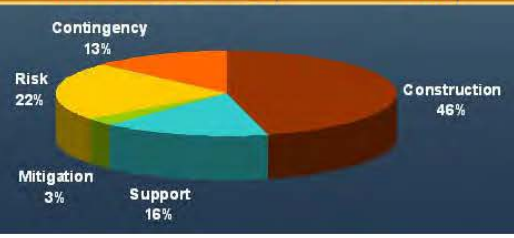
Seismic Retrofit Strategy Summary for Antioch Bridge

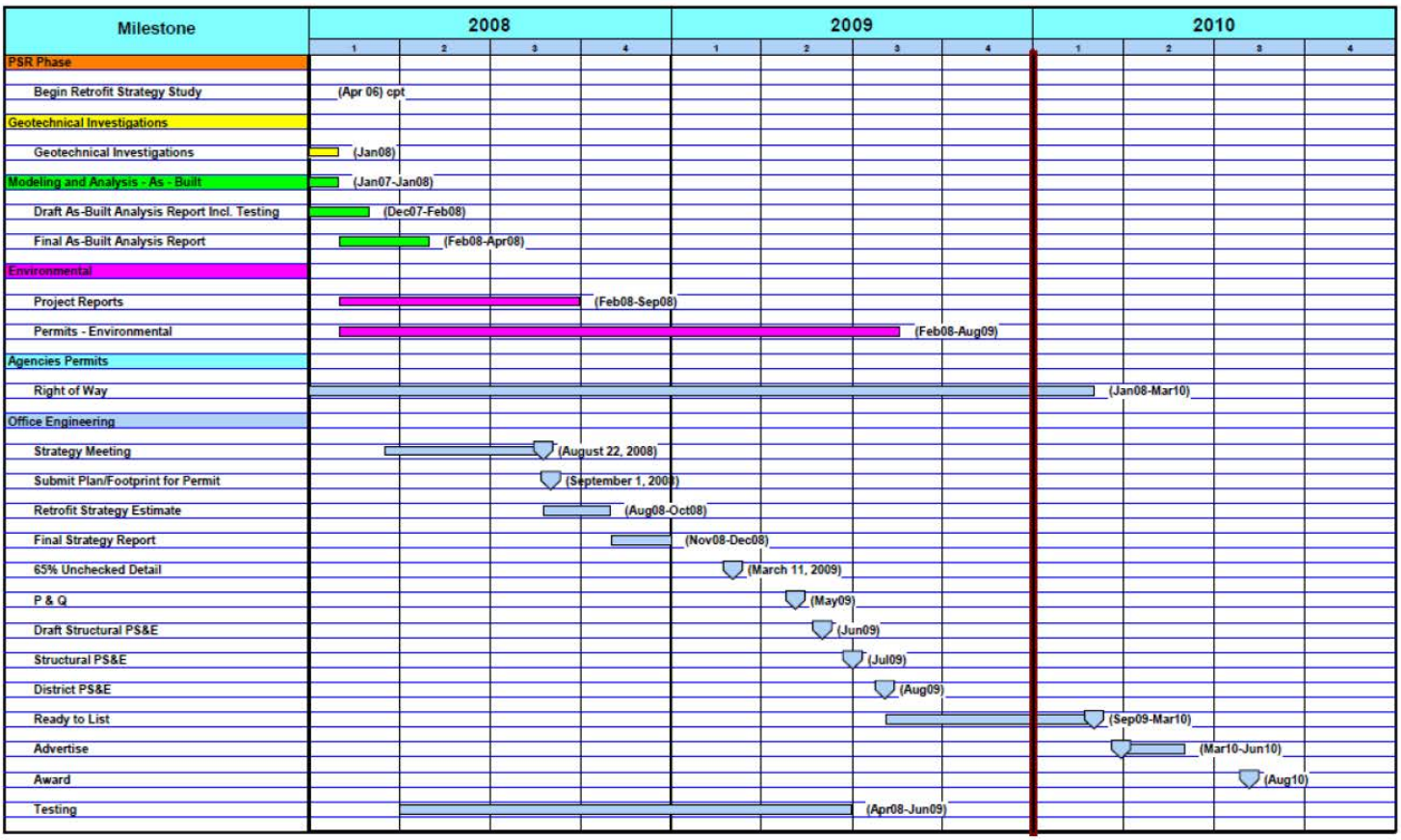
Seismic Retrofits of Dumbarton and Antioch Bridges

Project Cost and Schedule Summaries

Total Project Costs – $750 Million

Description	Antioch ($ Millions)	Dumbarton ($ Millions)
CONSTRUCTION COST ESTIMATE (ESCALATION TO MID YEAR OF CONSTRUCTION)	$98	$195
CONTINGENCIES	45	65
SUBTOTAL CAPITAL COST ESTIMATE	143	260
SUPPORT COST ESTIMATE	39	95
MITIGATION COST ESTIMATE	13	10
RISK COST ESTIMATE	72	118
TOTAL COST ESTIMATE	$267	$483





Dumbarton Bridge

Photo courtesy of Tom Paiva

Benicia-Martinez Bridge

REGIONAL MEASURE 1 TOLL BRIDGE PROGRAM

REGIONAL MEASURE 1 PROGRAM

Interstate 880/State Route 92 Interchange Reconstruction Project
Project Status: Under Construction

The Interstate 880/State Route 92 Interchange Reconstruction Project is the final project under the Regional Measure 1 Toll Bridge Program. Project completion fulfills a promise made to Bay Area voters in 1988 to deliver a slate of projects that help expand bridge capacity and improve safety on the bridges.

This corridor is consistently one of the Bay Area's most congested during the evening commute. This is due in part to the lane merging and weaving that is required by the existing cloverleaf interchange. The new interchange will feature direct freeway-to-freeway connector ramps that will increase traffic capacity and improve overall safety and traffic operations in the area. With the new direct-connector ramps, drivers coming off the San Mateo-Hayward Bridge can access Interstate 880 without having to compete with traffic headed onto east Route 92 from south Interstate 880 (see progress photos on pages 86 and 87).

Future Interstate 880/State Route 92 Interchange (as simulated) ,Looking West toward San Mateo.

Interstate 880/State Route 92 Interchange Reconstruction Contract

Contractor: Flatiron/Granite
Approved Capital Outlay Budget: $155.0 M
Status: 63% Complete As Of November 2009

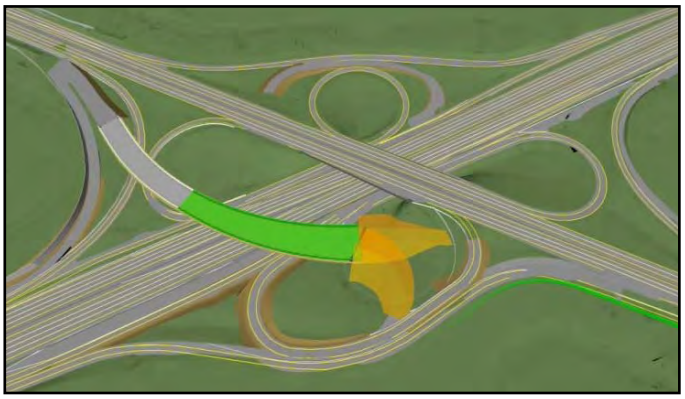
Overview of Progress to Date

92/880 Pump Station Construction in Progress

Stage 1 – Construct East Route 92 to North Interstate 880 Connector

The new east Route 92 to north Interstate 880 connector (ENCONN) is the most critical flyover structure for relieving congestion in the corridor. The ENCONN will be first used as a detour to allow for future stages of work, while keeping traffic flowing.

Status: ENCONN was completed and opened to detour traffic on May 16, 2009.

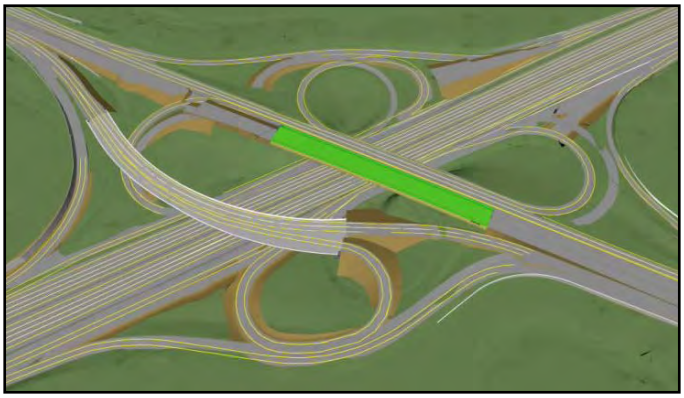


Stage 1 - Construct East Route 92 to North Interstate 880 Direct Connector

Stage 2 – Replace South Side of Route 92 Separation Structure

By detouring eastbound Route 92 traffic onto ENCONN, the existing separation structure that carries SR92 over I-880 can be replaced. The existing structure will be cut lengthwise, and then demolished and replaced separately. In this stage, the south side of the structure will be replaced, while west Route 92 and south-Interstate-880-to-east-Route-92 traffic will stay on the remaining structure.

Status: Work on the south side of the separation structure is nearly complete. The concrete roadway will be poured in January 2010 and pending weather, will be opened in March 2010. Foundations and columns have been installed.

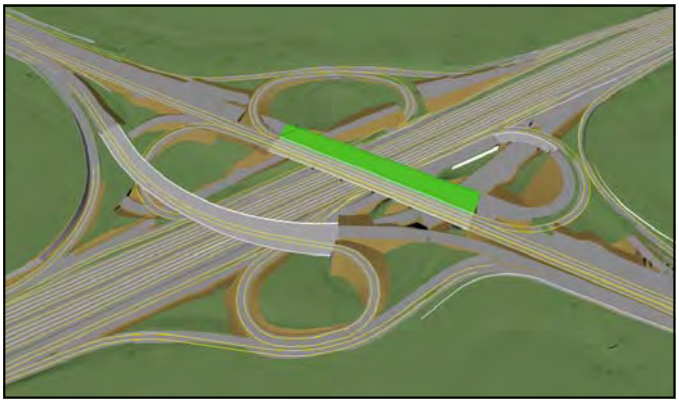


Stage 2 - Demolish and Replace South Side of Route 92 Separation Structure

Stage 3 – Replace North Side of Route 92 Separation Structure

Upon completion of Stage 2, the existing north side of the separation structure will be demolished and replaced. Its traffic will then be shifted onto the newly reconstructed south side.

Status: Pending Stage 2.

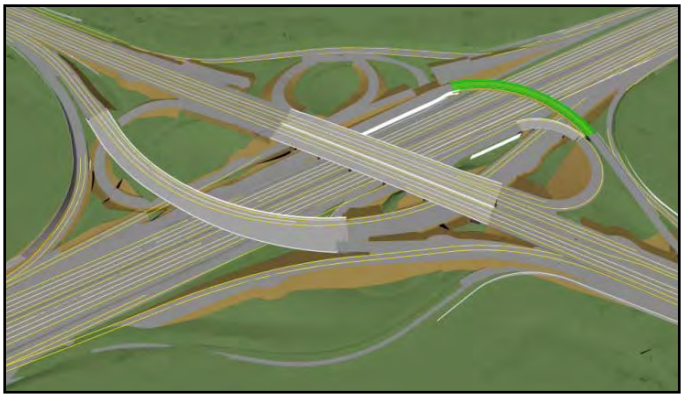


Stage 3 - Demolish and Replace North Side of Route 92 Separation Structure

Stage 4 – Final Realignment and Other Work

Upon completion of the Route 92 separation structure, east Route 92 traffic can be shifted onto its permanent alignment from the new ENCONN and directly under the new separation structure. Along with the ENCONN and Route 92 separation structures, several soundwalls, a pedestrian overcrossing on I-880 at Eldridge Avenue and other ramps and structures will also be reconstructed as part of this project.

Status: Work continues on walls in the northwest (Stage 2), southeast and northeast quadrants, as well as on the Eldridge Avenue pedestrian overcrossing. The new pump station construction is ongoing and scheduled to be completed in February 2010. The Calaroga Bridge is 50 percent complete.



Stage 4 - Final Realignment and Other Work

REGIONAL MEASURE 1 PROGRAM

Other Completed Projects

San Mateo-Hayward Bridge-Widening Project
Project Status: Completed 2003

This project expanded the low-rise concrete trestle section of the San Mateo-Hayward Bridge to allow for three lanes in each direction to match the existing configuration of the high-rise steel section of the bridge.

Widening of the San Mateo-Hayward Bridge Trestle on Left

Richmond-San Rafael Bridge Rehabilitation Projects
Project Status: Completed 2006

Two major rehabilitation projects for the Richmond-San Rafael Bridge were funded and completed:
(1) replacement of the western concrete approach trestle and ship-collision protection fender system; and
(2) rehabilitation of deck joints and resurfacing of the bridge deck.

In 2005, along with the seismic retrofit of the bridge, the trestle and fender replacement work was completed as part of the same project. Under a separate contract in 2006, the bridge was resurfaced with a polyester concrete overlay along with the repair of numerous deck joints.

New Richmond-San Rafael Bridge West Approach Trestle under Construction

Richmond Parkway Construction Project
Project Status: Completed 2001

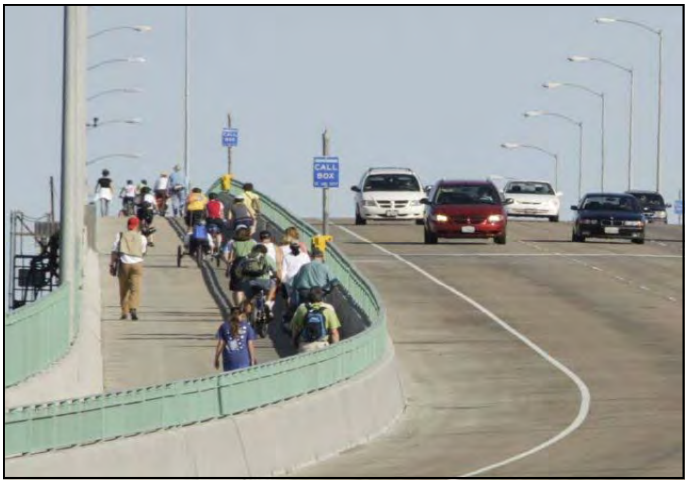
The final connections to the Richmond Parkway from Interstate 580 near the Richmond-San Rafael Bridge were completed in May 2001.

New Alfred Zampa Memorial (Carquinez) Bridge Project
Project Status: Completed 2003

New Alfred Zampa Memorial (Carquinez) Bridge Soon after Opening to Traffic, with Crockett Interchange Still under Construction

The new western span of the Carquinez Bridge, which replaced the original 1927 span, is a twin-towered suspension bridge with three mixed-flow lanes, a new carpool lane shoulders and a bicycle and pedestrian pathway.

Benicia-Martinez Bridge Project
Project Status: Completed 2009

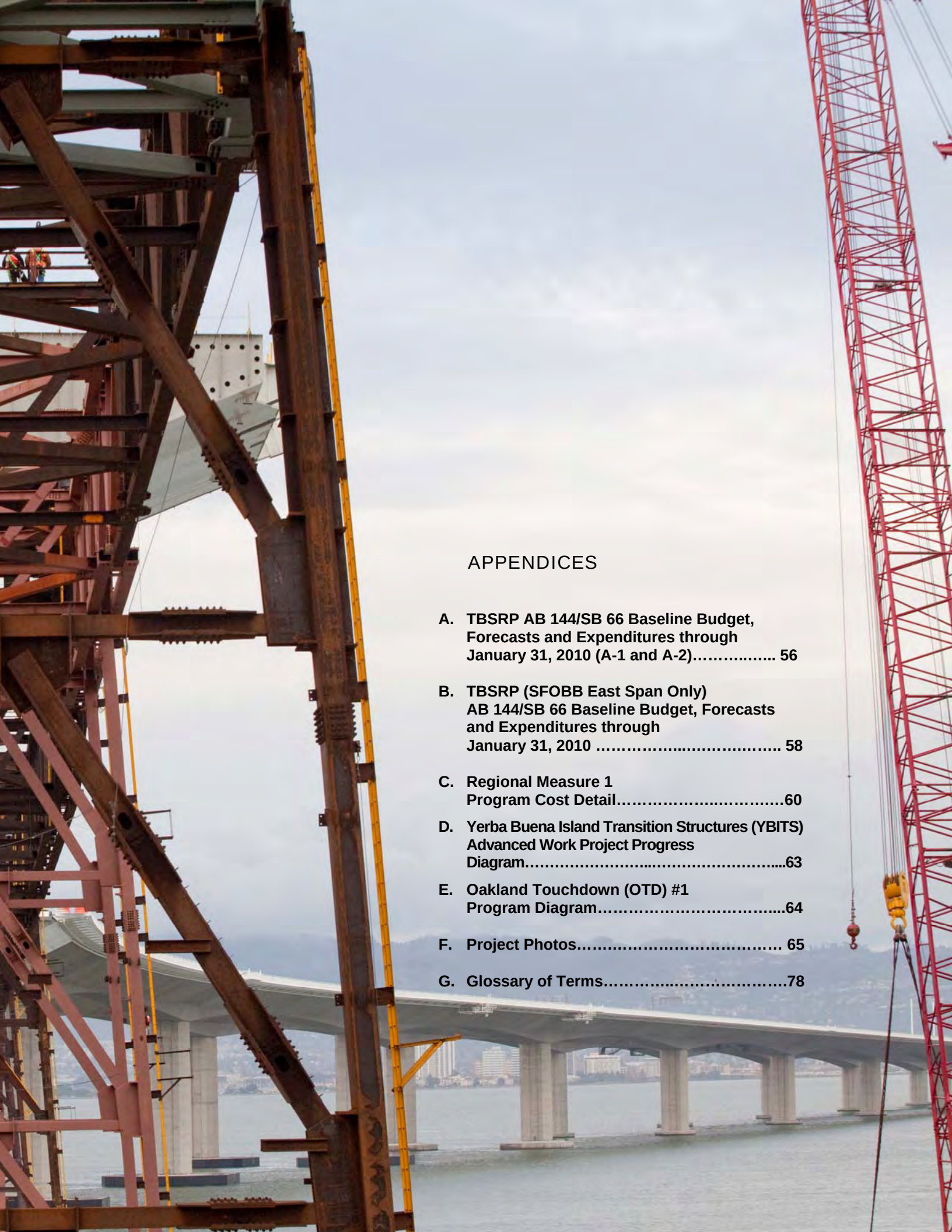


Benicia-Martinez Bridge Pedestrian/Bicycle Pathway Opened to The Public in August 2009

A two-year project to rehabilitate and reconfigure the original Benicia-Martinez Bridge began shortly after the opening of the new Congressman George Miller Bridge. The existing 1.2-mile roadway surface on the steel deck truss bridge was modified to carry four lanes of southbound traffic (one more than before)—with shoulders on both sides—plus a bicycle/pedestrian path on the west side of the span that connects to Park Road in Benicia and to Marina Vista Boulevard in Martinez. Reconstruction of the east side of the bridge and approaches was completed in August 2008 and reconstruction of the west side of the bridge an approaches and construction of the bicycle/ pedestrian pathway was completed in August 2009.

Bayfront Expressway (State Route 84) Widening Project
Project Status: Completed 2004

This project expanded and improved the roadway from the Dumbarton Bridge touchdown to the US 101/Marsh Road interchange by adding additional lanes and turn pockets and improving bicycle and pedestrian access in the area.



APPENDICES

Appendix A-1: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through January 31, 2010 ($ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (01/2010)	Cost To Date (01/2010)	Cost Forecast (01/2010)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.3	-	959.3	811.0	1,252.5	293.2
Capital Outlay Construction	4,492.2	203.8	4,696.0	3,197.2	4,875.2	179.2
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total	5,486.6	200.5	5,687.1	4,008.9	6,135.4	448.3
SFOBB West Approach Replacement						
Capital Outlay Support	120.0	(3.0)	117.0	117.0	117.0	-
Capital Outlay Construction	309.0	41.7	350.7	328.0	338.1	(12.6)
Total	429.0	38.7	467.7	445.0	455.1	(12.6)
SFOBB West Span Retrofit						-
Capital Outlay Support	75.0	-	75.0	74.8	75.0	-
Capital Outlay Construction	232.9	-	232.9	227.2	232.9	-
Total	307.9	-	307.9	302.0	307.9	-
Richmond-San Rafael Bridge Retrofit						
Capital Outlay Support	134.0	(7.0)	127.0	126.7	127.0	-
Capital Outlay Construction	780.0	(90.5)	689.5	667.5	689.5	-
Total	914.0	(97.5)	816.5	794.2	816.5	-
Benicia-Martinez Bridge Retrofit						-
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	177.8	-	177.8	177.8	177.8	-
Carquinez Bridge Retrofit						
Capital Outlay Support	28.7	-	28.7	28.8	28.7	-
Capital Outlay Construction	85.5	-	85.5	85.4	85.5	-
Total	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Bridge Retrofit						-
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	-	135.4	135.3	135.4	-
Total	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction	42.1	-	42.1	42.0	42.1	-
Total	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit						
Capital Outlay Support	33.5	-	33.5	33.2	33.5	-
Capital Outlay Construction	70.0	-	70.0	69.4	70.0	-
Total	103.5	-	103.5	102.6	103.5	-
Subtotal Capital Outlay Support	1,433.1	(10.0)	1,423.1	1,274.1	1,716.3	293.2
Subtotal Capital Outlay	6,286.8	155.0	6,441.8	4,891.7	6,608.4	166.6
Subtotal Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Miscellaneous Program Costs	30.0	-	30.0	24.7	30.0	-
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	141.7	7,926.7	6,191.2	8,362.4	435.7
Programmatic Risk	-	-	-	-	265.3	265.3
Program Contingency	900.0	(141.7)	758.3	-	57.3	(701.0)
Total Toll Bridge Seismic Retrofit Program	8,685.0	-	8,685.0	6,191.2	8,685.0	-

Note: Details may not sum to totals due to rounding effects.

Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through January 31, 2010 ($ Millions)

Bridge	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of Jan 2010 See Note (1)	Estimated Costs not yet Spent or Encumbered as of Jan 2010	Total Forecast as of Jan 2010
a	b	c	d	e	f = d + e
Other Completed Projects					
Capital Outlay Support	144.9	144.9	144.6	0.3	144.9
Capital Outlay	472.6	472.6	472.6	0.1	472.7
Total	617.5	617.5	617.2	0.4	617.6
Richmond-San Rafael					
Capital Outlay Support	134.0	127.0	126.7	0.3	127.0
Capital Outlay	698.0	689.5	674.2	15.3	689.5
Project Reserves	82.0	-	-	-	-
Total	914.0	816.5	800.9	15.6	816.5
West Span Retrofit					
Capital Outlay Support	75.0	75.0	74.8	0.2	75.0
Capital Outlay	232.9	232.9	232.7	0.2	232.9
Total	307.9	307.9	307.5	0.4	307.9
West Approach					
Capital Outlay Support	120.0	117.0	117.7	(0.7)	117.0
Capital Outlay	309.0	350.7	342.5	(4.4)	338.1
Total	429.0	467.7	460.2	(5.1)	455.1
SFOBB East Span -Skyway					
Capital Outlay Support	197.0	181.2	181.3	(0.1)	181.2
Capital Outlay	1,293.0	1,254.1	1,368.4	(114.3)	1,254.1
Total	1,490.0	1,435.3	1,549.7	(114.4)	1,435.3
SFOBB East Span -SAS- Superstructure					
Capital Outlay Support	214.6	214.6	208.3	244.8	453.1
Capital Outlay	1,753.7	1,753.7	1,649.6	297.9	1,947.5
Total	1,968.3	1,968.3	1,857.9	542.7	2,400.6
SFOBB East Span -SAS- Foundations					
Capital Outlay Support	62.5	37.6	37.6	-	37.6
Capital Outlay	339.9	307.3	308.7	(1.4)	307.3
Total	402.4	344.9	346.3	(1.4)	344.9
Small YBI Projects					
Capital Outlay Support	10.6	10.6	10.1	0.5	10.6
Capital Outlay	15.6	15.6	16.6	(0.9)	15.7
Total	26.2	26.2	26.7	(0.4)	26.3
YBI Detour					
Capital Outlay Support	29.5	84.5	79.6	11.1	90.7
Capital Outlay	131.9	492.9	493.0	(5.7)	487.3
Total	161.4	577.4	572.6	5.4	578.0
YBI - Transition Structures					
Capital Outlay Support	78.7	78.8	16.4	100.5	116.9
Capital Outlay	299.4	206.3	0.1	210.8	210.9
Total	378.1	285.1	16.5	311.3	327.8
Oakland Touchdown					
Capital Outlay Support	74.4	84.6	72.0	22.9	94.9
Capital Outlay	283.8	288.0	218.0	63.4	281.4
Total	358.2	372.6	290.0	86.3	376.3
East Span Other Small Project					
Capital Outlay Support	212.3	206.5	210.9	(4.3)	206.6
Capital Outlay	170.8	170.8	94.0	52.6	146.6
Total	383.1	377.3	304.9	48.3	353.2
Existing Bridge Demolition					
Capital Outlay Support	79.7	60.9	0.4	60.5	60.9
Capital Outlay	239.2	239.1	-	232.1	232.1
Total	318.9	300.0	0.4	292.6	293.0
Miscellaneous Program Costs	30.0	30.0	25.4	4.6	30.0
Total Capital Outlay Support (2)	1,463.2	1,453.2	1,305.8	440.6	1,746.4
Total Capital Outlay	6,321.8	6,473.5	5,870.4	745.7	6,616.1
Program Total	7,785.0	7,926.7	7,176.2	1,186.3	8,362.5

(1). Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.
(2). BSA provided a distribution of program contingency in December 2004 based on Bechtel Infrastructure Corporation input.
This column is subject to revision upon completion of Department's risk assessment update.
(3). Total Capital Outlay Support includes program indirect costs.

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through January 31, 2010 ($ Millions)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (01/2010)	Cost To Date (01/2010)	Cost Forecast (01/2010)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project							
East Span - SAS Superstructure	0120FX						
Capital Outlay Support		214.6	-	214.6	205.4	453.1	238.5
Capital Outlay Construction		1,753.7	-	1,753.7	904.9	1,947.5	193.8
Total		1,968.3	-	1,968.3	1,110.3	2,400.6	432.3
SAS W2 Foundations	0120CX						
Capital Outlay Support		10.0	(0.8)	9.2	9.2	9.2	-
Capital Outlay Construction		26.4	-	26.4	25.8	26.4	-
Total		36.4	(0.8)	35.6	35.0	35.6	-
YBI South/South Detour	0120RX						
Capital Outlay Support		29.4	55.1	84.5	78.5	90.7	6.2
Capital Outlay Construction		132.0	360.9	492.9	419.9	487.3	(5.6)
Total		161.4	416.0	577.4	498.4	578.0	0.6
YBI Transition Structures (see notes below)	0120PX						
Capital Outlay Support		78.7	0.1	78.8	29.5	116.9	38.1
Capital Outlay Construction		299.3	(93.0)	206.3	-	210.9	4.6
Total		378.0	(92.9)	285.1	29.5	327.8	42.7
* YBI- Transition Structures Prior-to-Split Costs							
Capital Outlay Support				16.7	16.4	16.4	(0.3)
Capital Outlay Construction				-	-	-	-
Total				16.7	16.4	16.4	(0.3)
* YBI- Transition Structures Contract No. 1							
Capital Outlay Support				45.1	9.3	75.1	30.1
Capital Outlay Construction				144.0	-	159.9	15.9
Total				189.1	9.3	235.0	46.0
* YBI- Transition Structures Contract No. 2							
Capital Outlay Support				16.0	3.7	24.4	8.4
Capital Outlay Construction				59.0	-	47.7	(11.3)
Total				75.0	3.7	72.1	(2.9)
* YBI- Transition Structures Contract No. 3 Landscape							
Capital Outlay Support				1.0	-	1.0	-
Capital Outlay Construction				3.3	-	3.3	-
Total				4.3	-	4.3	-
Oakland Touchdown (see notes below)	01204X						
Capital Outlay Support		74.4	10.2	84.6	70.5	94.9	10.3
Capital Outlay Construction		283.8	4.2	288.0	203.4	281.4	(6.6)
Total		358.2	14.4	372.6	273.9	376.3	3.7
* OTD Prior-to-Split Costs							
Capital Outlay Support				21.0	20.1	21.7	0.7
Capital Outlay Construction				-	-	-	-
Total				21.0	20.1	21.7	0.7
* OTD Submarine Cable	0120K4						
Capital Outlay Support				0.9	0.9	0.9	-
Capital Outlay Construction				9.6	7.8	9.6	-
Total				10.5	8.7	10.5	-
* OTD No. 1 (Westbound)	0120L4						
Capital Outlay Support				45.5	43.1	47.3	1.8
Capital Outlay Construction				212.0	195.6	210.4	(1.6)
Total				257.5	238.7	257.7	0.2
* OTD No. 2 (Eastbound)	0120M4						
Capital Outlay Support				15.8	5.7	23.5	7.7
Capital Outlay Construction				62.0	-	57.0	(5.0)
Total				77.8	5.7	80.5	2.7
* OTD Electrical Systems	0120N4						
Capital Outlay Support				1.4	0.8	1.5	0.1
Capital Outlay Construction				4.4	-	4.4	-
Total				5.8	0.8	5.9	0.1

Note: Details may not sum to totals due to rounding effects.

Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through January 31, 2010 ($ Millions) (continued)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (01/2010)	Cost To Date (01/2010)	Cost Forecast (01/2010)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
East Span - Skyway	01202X						
Capital Outlay Support		197.0	(15.8)	181.2	181.2	181.2	-
Capital Outlay Construction		1,293.0	(38.9)	1,254.1	1,236.9	1,254.1	-
Total		1,490.0	(54.7)	1,435.3	1,418.1	1,435.3	-
East Span - SAS E2/T1 Foundations	0120EX						-
Capital Outlay Support		52.5	(24.1)	28.4	28.4	28.4	-
Capital Outlay Construction		313.5	(32.6)	280.9	275.0	280.9	-
Total		366.0	(56.7)	309.3	303.4	309.3	-
Existing Bridge Demolition	01209X						
Capital Outlay Support		79.7	(18.8)	60.9	0.4	60.9	-
Capital Outlay Construction		239.2	(0.1)	239.1	-	232.1	(7.0)
Total		318.9	(18.9)	300.0	0.4	293.0	(7.0)
YBI/SAS Archeology	01207X						
Capital Outlay Support		1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction		1.1	-	1.1	1.1	1.1	-
Total		2.2	-	2.2	2.2	2.2	-
YBI - USCG Road Relocation	0120QX						
Capital Outlay Support		3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction		3.0	-	3.0	2.8	3.0	-
Total		6.0	-	6.0	5.5	6.0	-
YBI - Substation and Viaduct	0120GX						
Capital Outlay Support		6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction		11.6	-	11.6	11.3	11.6	-
Total		18.1	-	18.1	17.7	18.1	-
Oakland Geofill	01205X						-
Capital Outlay Support		2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction		8.2	-	8.2	8.2	8.2	-
Total		10.7	-	10.7	10.7	10.7	-
Pile Installation Demonstration Project	01208X						
Capital Outlay Support		1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction		9.2	-	9.2	9.2	9.2	-
Total		11.0	-	11.0	11.0	11.0	-
Stormwater Treatment Measures	0120JX						
Capital Outlay Support		6.0	2.2	8.2	8.1	8.2	-
Capital Outlay Construction		15.0	3.3	18.3	16.7	18.3	-
Total		21.0	5.5	26.5	24.8	26.5	-
Right-of-Way and Environmental Mitigation	0120X9						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay & Right-of-Way		72.4	-	72.4	51.2	72.4	-
Total		72.4	-	72.4	51.2	72.4	-
Sunk Cost - Existing East Span Retrofit	04343X & 04300X						
Capital Outlay Support		39.5	-	39.5	39.5	39.5	-
Capital Outlay Construction		30.8	-	30.8	30.8	30.8	-
Total		70.3	-	70.3	70.3	70.3	-
Other Capital Outlay Support							
Environmental Phase		97.7	-	97.7	97.7	97.7	-
Pre-Split Project Expenditures		44.9	-	44.9	44.9	44.9	-
Non-project Specific Costs		20.0	(8.0)	12.0	3.2	12.0	-
Total		162.6	(8.0)	154.6	145.8	154.6	-
Subtotal Capital Outlay Support		959.3	-	959.3	811.0	1,252.5	293.2
Subtotal Capital Outlay Construction		4,492.2	203.8	4,696.0	3,197.2	4,875.2	179.2
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)
							-
Total SFOBB East Span Replacement Project		5,486.6	200.5	5,687.1	4,008.9	6,135.4	448.3

Note: Details may not sum to totals due to rounding effects.

Appendix C: Regional Measure 1 Program Cost Detail ($ Millions)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (01/2010)	Cost To Date (01/2010)	Cost Forecast (01/2010)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
New Benicia-Martinez Bridge Project							
New Bridge	**00603_**						
Capital Outlay Support							
BATA Funding		84.9	6.9	91.8	91.8	91.8	-
Non-BATA Funding		-	0.1	0.1	0.1	0.1	-
Subtotal		84.9	7.0	91.9	91.9	91.9	-
Capital Outlay Construction				-			-
BATA Funding		661.9	94.6	756.5	753.8	756.5	-
Non-BATA Funding		10.1	-	10.1	10.1	10.1	-
Subtotal		672.0	94.6	766.6	763.9	766.6	-
Total		756.9	101.6	858.5	855.8	858.5	-
I-680/I-780 Interchange Reconstruction	**00606_**						
Capital Outlay Support							
BATA Funding		24.9	5.2	30.1	30.1	30.1	-
Non-BATA Funding		1.4	5.2	6.6	6.3	6.6	-
Subtotal		26.3	10.4	36.7	36.4	36.7	-
Capital Outlay Construction							
BATA Funding		54.7	26.9	81.6	77.1	81.6	-
Non-BATA Funding		21.6	-	21.6	21.7	21.6	-
Subtotal		76.3	26.9	103.2	98.8	103.2	-
Total		102.6	37.3	139.9	135.2	139.9	-
I-680/Marina Vista Interchange Reconstruction	**00605_**						
Capital Outlay Support		18.3	1.8	20.1	20.1	20.1	-
Capital Outlay Construction		51.5	4.9	56.4	56.1	56.4	-
Total		69.8	6.7	76.5	76.2	76.5	-
New Toll Plaza and Administration Building	**00604_**						
Capital Outlay Support		11.9	3.8	15.7	15.7	15.7	-
Capital Outlay Construction		24.3	2.0	26.3	25.1	26.3	-
Total		36.2	5.8	42.0	40.8	42.0	-
Existing Bridge & Interchange Modifications	**0060A_**						
Capital Outlay Support							
BATA Funding		4.3	13.5	17.8	17.7	17.8	-
Non-BATA Funding		-	0.9	0.9	0.8	0.9	-
Subtotal		4.3	14.4	18.7	18.5	18.7	-
Capital Outlay Construction							
BATA Funding		17.2	32.8	50.0	36.6	50.0	-
Non-BATA Funding		-	9.5	9.5	-	9.5	-
Subtotal		17.2	42.3	59.5	36.6	59.5	-
Total		21.5	56.7	78.2	55.1	78.2	-
Other Contracts	**See note below**						
Capital Outlay Support		11.4	(2.3)	9.1	8.9	9.1	-
Capital Outlay Construction		20.3	3.3	23.6	17.4	23.6	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-
Total		52.1	0.9	53.0	43.3	53.0	-
Subtotal BATA Capital Outlay Support		155.7	28.9	184.6	184.3	184.6	-
Subtotal BATA Capital Outlay Construction		829.9	164.5	994.4	966.1	994.4	-
Subtotal Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-
Subtotal Non-BATA Capital Outlay Support		1.4	6.2	7.6	7.2	7.6	-
Subtotal Non-BATA Capital Outlay Construction		31.7	9.5	41.2	31.8	41.2	-
Project Reserves		20.8	3.6	24.4	-	24.4	-
Total New Benicia-Martinez Bridge Project		1,059.9	212.6	1,272.5	1,206.4	1,272.5	-

Notes: **Includes EA's 00601_,00603_,00605_,00606_, 00608_, 00609_, 0060A_, 0060C_, 0060E_, 0060F_, 0060G_, and 0060H_ and all Project Right-of-Way**

Note: Details may not sum to totals due to rounding effects.

Appendix C: Regional Measure 1 Program Cost Detail ($ Millions) (Continued)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (01/2010)	Cost To Date (01/2010)	Cost Forecast (01/2010)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Carquinez Bridge Replacement Project							
New Bridge	**01301_**						
Capital Outlay Support		60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction		253.3	2.7	256.0	255.9	256.0	-
Total		313.8	2.4	316.2	316.1	316.2	-
Crockett Interchange Reconstruction	**01305_**						
Capital Outlay Support		32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction		73.9	(1.9)	72.0	71.9	72.0	-
Total		105.9	(2.0)	103.9	103.8	103.9	-
Existing 1927 Bridge Demolition	**01309_**						
Capital Outlay Support		16.1	(0.5)	15.6	15.6	15.6	-
Capital Outlay Construction		35.2	-	35.2	34.8	35.2	-
Total		51.3	(0.5)	50.8	50.4	50.8	-
Other Contracts	**See note below**						
Capital Outlay Support		15.8	1.2	17.0	16.3	17.0	-
Capital Outlay Construction		18.8	(1.2)	17.6	16.2	17.6	-
Capital Outlay Right-of-Way		10.5	(0.1)	10.4	9.9	10.4	-
Total		45.1	(0.1)	45.0	42.4	45.0	-
Subtotal BATA Capital Outlay Support		124.4	0.3	124.7	124.0	124.7	-
Subtotal BATA Capital Outlay Construction		381.2	(0.4)	380.8	378.8	380.8	-
Subtotal Capital Outlay Right-of-Way		10.5	(0.1)	10.4	9.9	10.4	-
Project Reserves		12.1	(9.8)	2.3	-	2.3	-
Total Carquinez Bridge Replacement Project		528.2	(10.0)	518.2	512.7	518.2	-

Notes: **Other Contracts includes EA's 01301_,01302_, 01303_, 01304_,01305_, 01306_, 01307_, 01308_, 01309_,0130A_, 0130C_, 0130D_ , 0130F_, 0130G_, 0130H_, 0130J_, 00453_, 00493_, 04700_, 00607_, 2A270_, and 29920_ and all Project Right-of-Way**

Note: Details may not sum to totals due to rounding effects.

Appendix C: Regional Measure 1 Program Cost Detail ($ Millions) (Continued)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (01/2010)	Cost To Date (01/2010)	Cost Forecast (01/2010)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation			See note [1] below				
Capital Outlay Support							
BATA Funding		2.2	(0.8)	1.4	1.4	1.4	-
Non-BATA Funding		8.6	1.8	10.4	10.4	10.4	-
Subtotal		10.8	1.0	11.8	11.8	11.8	-
Capital Outlay Construction							
BATA Funding		40.2	(6.8)	33.4	33.3	33.4	-
Non-BATA Funding		51.1	-	51.1	51.1	51.1	-
Subtotal		91.3	(6.8)	84.5	84.4	84.5	-
Project Reserves		-	0.8	0.8	-	0.8	-
Total		102.1	(5.0)	97.1	96.2	97.1	-
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	04152_						
Capital Outlay Support							
BATA Funding		4.0	(0.7)	3.3	3.3	3.3	-
Non-BATA Funding		4.0	(4.0)	-	-	-	-
Subtotal		8.0	(4.7)	3.3	3.3	3.3	-
Capital Outlay Construction		16.9	(0.6)	16.3	16.3	16.3	-
Project Reserves		0.1	0.3	0.4	-	0.4	-
Total		25.0	(5.0)	20.0	19.6	20.0	-
Richmond Parkway Project (RM 1 Share Only)	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		5.9	-	5.9	4.3	5.9	-
Total		5.9	-	5.9	4.3	5.9	-
San Mateo-Hayward Bridge Widening	See note [2] below						
Capital Outlay Support		34.6	(0.5)	34.1	34.1	34.1	-
Capital Outlay Construction		180.2	(6.1)	174.1	174.1	174.1	-
Capital Outlay Right-of-Way		1.5	(0.9)	0.6	0.5	0.6	-
Project Reserves		1.5	(0.5)	1.0	-	1.0	-
Total		217.8	(8.0)	209.8	208.7	209.8	-
I-880/SR-92 Interchange Reconstruction	EA's 23317_, 01601_, and 01602_						
Capital Outlay Support		28.8	34.6	63.4	51.6	63.4	-
Capital Outlay Construction							
BATA Funding		85.2	66.2	151.4	88.5	151.4	-
Non-BATA Funding		9.6	-	9.6	-	9.6	-
Subtotal		94.8	66.2	161.0	88.5	161.0	-
Capital Outlay Right-of-Way		9.9	7.0	16.9	12.1	16.9	-
Project Reserves		0.3	3.4	3.7	-	3.7	-
Total		133.8	111.2	245.0	152.2	245.0	-
Bayfront Expressway Widening	EA's 00487_, 01511_, and 01512_						
Capital Outlay Support		8.6	(0.2)	8.4	8.3	8.4	-
Capital Outlay Construction		26.5	(1.5)	25.0	24.9	25.0	-
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		0.8	(0.3)	0.5	-	0.5	-
Total		36.1	(2.0)	34.1	33.4	34.1	-
US 101/University Avenue Interchange Modification	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		3.8	-	3.8	3.7	3.8	-
Total		3.8	-	3.8	3.7	3.8	-
Subtotal BATA Capital Outlay Support		358.3	61.6	419.9	407.0	419.9	-
Subtotal BATA Capital Outlay Construction		1,569.8	215.3	1,785.1	1,690.0	1,785.1	-
Subtotal Capital Outlay Right-of-Way		42.5	5.9	48.4	39.7	48.4	-
Subtotal Non-BATA Capital Outlay Support		14.0	4.0	18.0	17.6	18.0	-
Subtotal Non-BATA Capital Outlay Construction		92.4	9.5	101.9	82.9	102.0	0.1
Project Reserves		35.6	(2.5)	33.1	-	33.0	(0.1)
Total RM1 Program		2,112.6	293.8	2,406.4	2,237.2	2,406.4	-

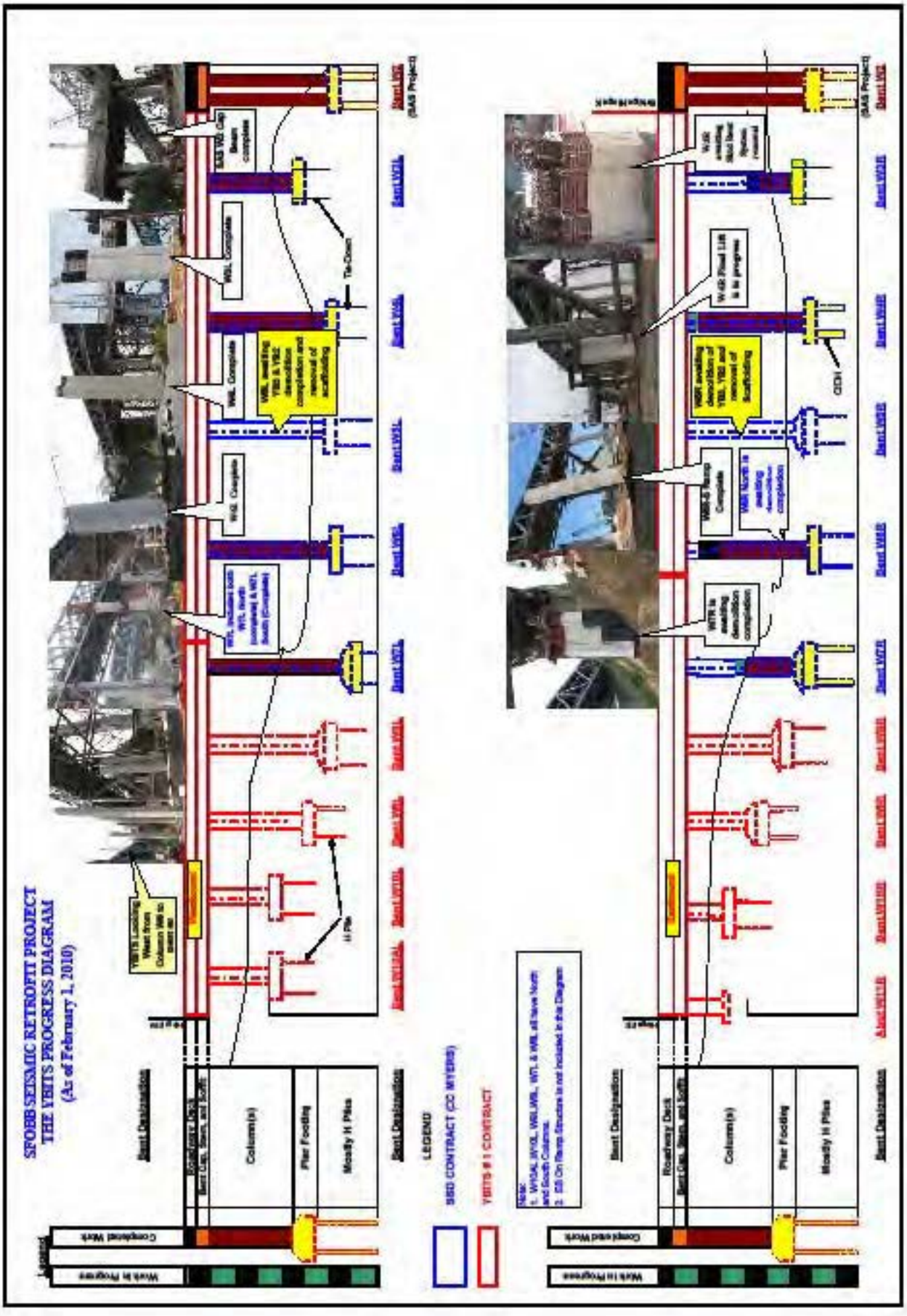
Notes:

1 Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U_ and 04157_

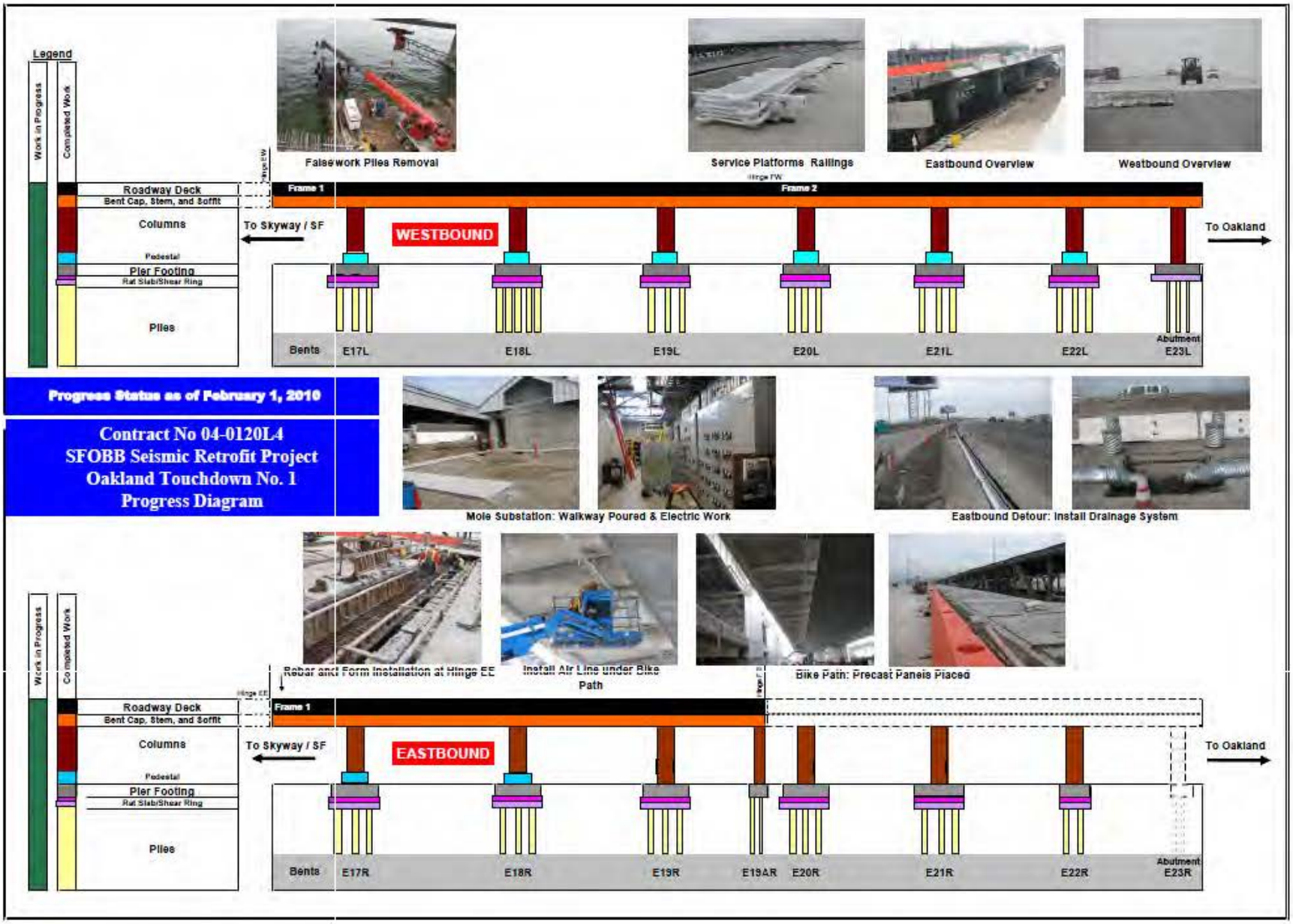
2 San Mateo-Hayward Bridge Widening Includes EA's 00305_, 04501_, 04502_, 04503_, 04504_, 04505_, 04506_, 04507_, 04508_, 04509_, 27740_, 27790_, 04860_

Notes: *2Details may not sum to totals due to rounding effects.*

Appendix D: YBITS Advanced Work Project Progress Diagram



Appendix E: OTD #1 Program Diagram

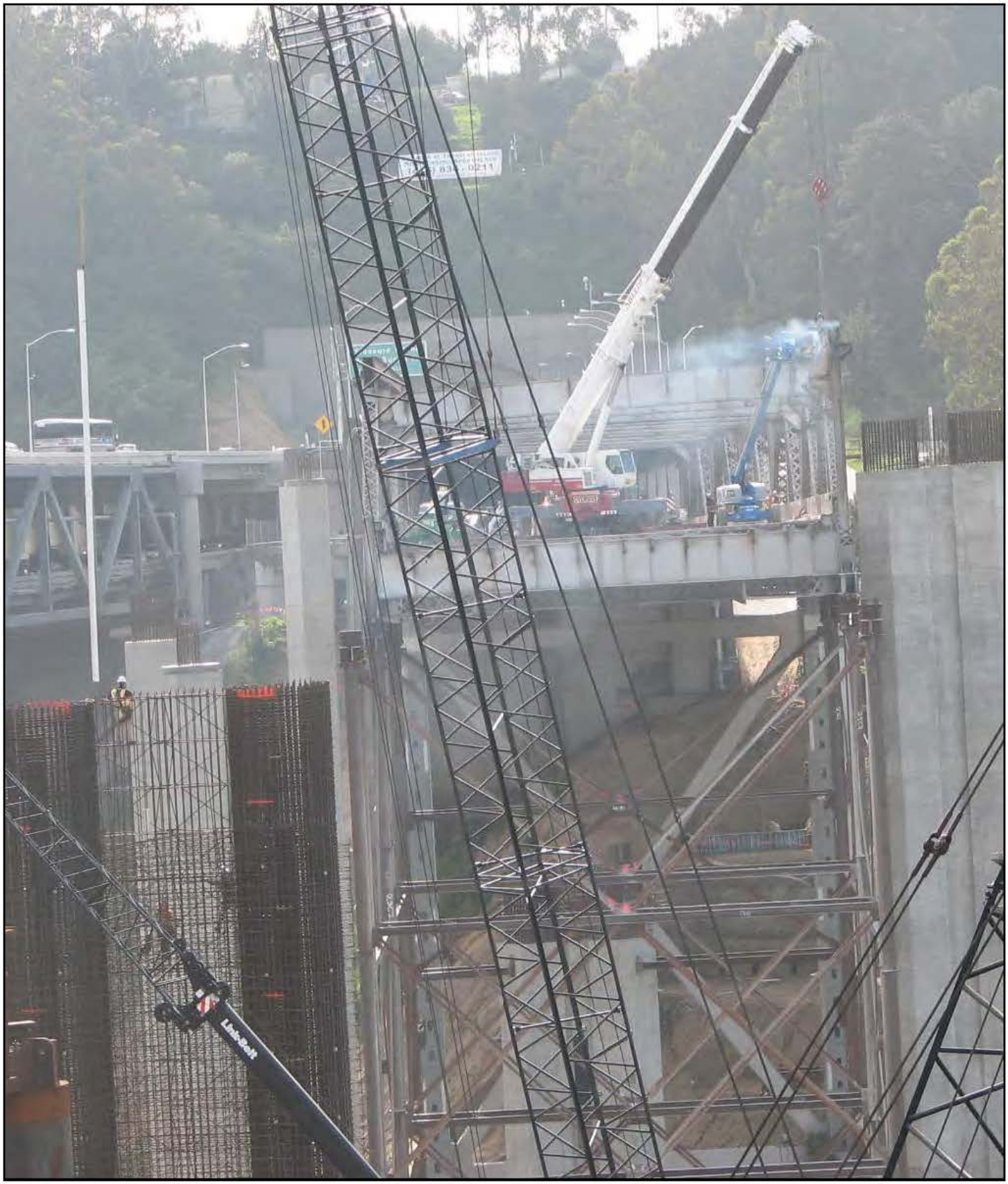


Appendix F: Project Progress Photographs

Shear-leg Barge Crane and San Francisco Skyline

Appendix F: Project Progress Photographs

Yerba Buena Island Detour Existing Bridge Demolition



Demolition of Existing Bridge Span Leading to the Yebra Buena Tunnel

Skid Bent System Disassembly in Progress

Demolition of Existing Bridge near the YBI Tunnel

Appendix F: Project Progress Photographs

Self-Anchored Suspension Bridge Fabrication

SAS Tower Lift 2 North Shaft Being Fabricated in Bay 10

SAS Lift 8CW Being Prime Coated

SAS ZPMC Ship Unloading of OBG Lift 1E

SAS OBG Lift 3W Being Loaded onto the Ship

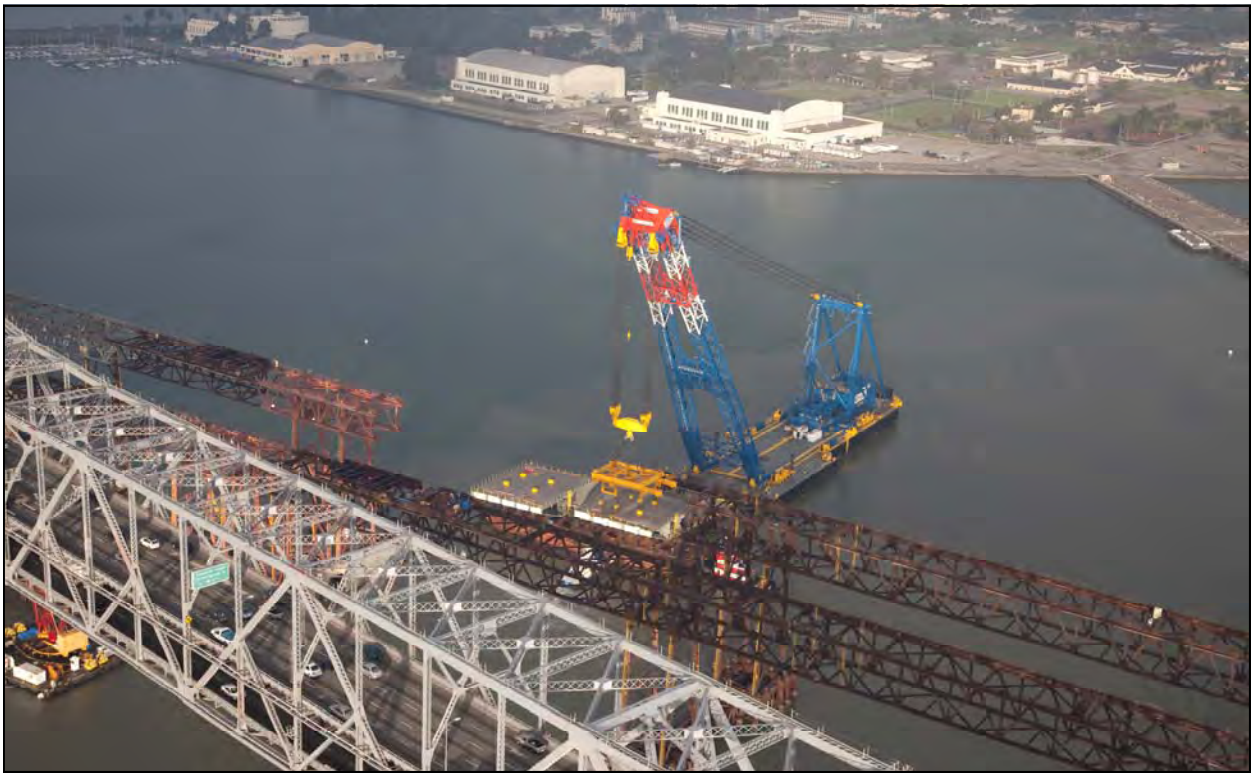
SAS Tower Lift 1 & 2 in Trail Assembly

Appendix F: Project Progress Photographs

Self-Anchored Suspension Bridge Field Work

SAS - OBG Lift 1E Placed on Eastbound Temporary Support Structure

SAS - First OBG Lift 1E Lifted onto Eastbound Temporary Support Structure



SAS - Shear-leg Crane Barge Placing OBG Lift 1E and 2E on to Eastbound Temporary Support Structure

SAS—Crossbeam Sections Stored on Barge in San Francisco Bay

Appendix F: Project Progress Photographs

Oakland Touchdown

Oakland Touchdown #1 Bike path Hand Rails

Oakland Touchdown Mole Substation Electrical Equipment Installed

Oakland Touchdown Eastbound Detour Roadway Drainage

Oakland Touchdown #1 of Conduit Installation

Appendix F: Project Progress Photographs

92/880 Interchange

92/880 Widening at Mount Eden Overhead Crossing

92/880 Pump Station Construction in Progress

92/880 Site Preparation of New Route 92 and Interstate 880 Separator

Appendix G: Glossary of Terms

AB144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

BATA BUDGET: The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

CURRENT APPROVED BUDGET: The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

COST TO DATE: The actual expenditures incurred by the program, project or contract as of the month and year shown.

COST FORECAST: The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

AT COMPLETION VARIANCE or VARIANCE (cost): The mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

BATA PROJECT COMPLETE BASELINE: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

PROJECT COMPLETE SCHEDULE FORECAST: The current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

% COMPLETE: % Complete is based on an evaluation of progress on the project, expenditures to date, and schedule.

100% Recyclable

This document, including the coil binding, is 100% recyclable

The information in this report is provided in accordance with California Government code Section 755. This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production is $1,574,873.73.

URS Hatch Mott MacDonald
Bay Area Management Consultants
An Association of URS Corporation and Hatch Mott MacDonald

Photo courtesy of Tom Paiva

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 6a1

Item- San Francisco-Oakland Bay Bridge Updates
Yerba Buena Island Detour Update

Recommendation:
For Information Only

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
A verbal update on the Yerba Buena Island Detour contract will be provided at the March 4th meeting.

Attachment(s):
N/A

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Brian Maroney, Toll Bridge Deputy Program Manager, Caltrans

RE: Agenda No. - 6a2
San Francisco-Oakland Bay Bridge Updates
Item- Yerba Buena Island Detour
S-Curve Update

Recommendation:
For Information Only

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
A verbal update on the S-curve will be provided at the March 4th meeting.

Attachment(s):
N/A

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 6b1

Item- San Francisco-Oakland Bay Bridge Updates
Yerba Buena Island Transition Structures No. 1 Update

Recommendation:
For Information Only

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
A verbal update on the Yerba Buena Island Transition Structures No. 1 contract will be provided at the March 4th meeting.

Attachment(s):
N/A

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 6c1

Item- San Francisco-Oakland Bay Bridge Updates
Oakland Touchdown No. 1 Update

Recommendation:
For Information Only

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
A verbal update on the Oakland Touchdown No. 1 contract will be provided at the March 4th meeting.

Attachment(s):
N/A

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** February 24, 2010

FR: Brian Maroney, Toll Bridge Deputy Program Manager, Caltrans

RE: Agenda No. - 7

Item- Eyebar Repair Update

Recommendation:
For Information Only

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
A verbal update on the eyebar repair will be provided at the March 4th meeting.

Attachment(s):
N/A

TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE
CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) **DATE:** March 1, 2010

FR: Jason Weinstein, Senior Program Coordinator, BATA

RE: Agenda No. - 8

Item- Antioch/ Dumbarton Bridge Retrofit Update

Recommendation:
For Information Only

Cost:
N/A

Schedule Impacts:
N/A

Discussion:
The Antioch and Dumbarton Bridge Seismic retrofit projects are on target to meet the schedules for award of both contracts approved by the TBPOC at its January 7, 2010 meeting. The Antioch Bridge project will open bids on March 10, 2010 and the Dumbarton Bridge project was ready to list on February 17, 2010.

The prototype bearing project associated with Antioch and Dumbarton retrofit projects has been completed and has been successful. The bearing test results document that Earthquake Protection Systems (EPS) can manufacture the bearings. Quality control (QC) of the prototype bearings was done by EPS with Materials Engineering and Testing Services (METS) staff observing and the quality assurance (QA) was done at the University of California, San Diego also with METS staff observing. The bearings allow for the seismic displacement through a sliding mechanism; limit shear to the seismically vulnerable substructure, and reduce seismic inertial forces in the superstructure; and dissipate energy through friction at the sliding interface. The production bearings will be purchased for each project as part of the items of work for each contract respectively.

There has been great progress made with respect to the concrete collars which are part of the current seismic retrofit design for Dumbarton. It was stated at the January 7, 2010 TBPOC meeting that there is some debate between the Designers and the Toll Bridge

Seismic Peer Review Panel as to the need for this element of the retrofit. An independent expert has been engaged to take a look at this element of the retrofit project and a preliminary report on the findings has been produced. Once a final determination has been made, a decision on how to handle any change of the current design documents, if required, will be brought to a future TBPOC meeting for discussion.

Attachment(s):
N/A

ITEM 9: OTHER BUSINESS

No Attachments